

# The Mining Journal,

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad]

No. 2324.—Vol. L.

LONDON, SATURDAY, MARCH 6, 1880.

[WITH SUPPLEMENT.] PRICE SIXPENCE. PER ANNUM, BY POST, £1 4s.

**JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER.**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

Business transacted in all descriptions of MINING Stocks and Shares (Foreign and Colonial), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Telegraph, Tramway, Shipping, Canal, Gas, and Dock Shares, and all Miscellaneous Shares.

Business negotiated in Stocks and Shares not having a general market every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing prices of the week.

**MINES INSPECTED.**  
CITY BANK, LONDON.—SOUTH CORNWALL BANK, ST. AUSTELL.

**RAIL DEALINGS** in the following, or part:—

Almada, 14s.	20 Great Holway.	10 Santa Barbara, £2 11 3
Bedford, 21s.	20 Herodfoot, £4.	5 South France, £17 1/2
Belmont, 21s.	50 Hingston Down, 26s 6	10 South Condurow, £12
Belmont, 21s.	50 I.X.L., 6s. 6d.	50 South Darren, £23 13 9
Belmont, 21s.	100 Javali, 8s.	20 South Crebor.
Belmont, 21s.	50 Killifreth, 26s. 3d., c p	20 S. E. Wynad, £2 1/2
Belmont, 21s.	20 Leadhills, £3 17s. 6d.	75 S. Penstruthal, 15s.
Belmont, 21s.	50 Last Chance, 12s. 6d.	10 Tankerville, £5 12s. 6
Belmont, 21s.	15 Mineral Corporation.	5 Tincroft, £21.
Belmont, 21s.	20 Mellanear, £5 7s. 6d.	20 Tocomo, 7s.
Belmont, 21s.	50 Marke Valley, £2 17 6	20 Tolima (A).
Belmont, 21s.	10 Mona, £14.	25 U. Van and Glyn, 17s. 6
Belmont, 21s.	50 Nouveau Monde, 30s.	10 Van, £21 1/2
Belmont, 21s.	50 N. Penstruthal, £2 1/2	25 W. Assheton, £2 17 6
Belmont, 21s.	60 N. D'Ersey, 20s.	10 W. Chiverton, £2 1/2 c p
Belmont, 21s.	50 N. Herodfoot, 13s. 9d.	5 West Peavor.
Belmont, 21s.	30 Pandora, 18s. 9d.	10 West Kitty, £2 1/2
Belmont, 21s.	25 Port Nigell, £2 15s.	20 West Phoenix, £2 1/2
Belmont, 21s.	200 Port Phillip, 11s.	10 Wheel Kitty, £5.
Belmont, 21s.	100 Prince of Wales, 15s.	10 Wheel Peavor, £21.
Belmont, 21s.	15 Panulicillo, £5 3s. 9d.	30 Wheel Crebor, £2 1/2
Belmont, 21s.	75 Parys Copper, 36s.	10 Wheel Grenville, £2 1/2
Belmont, 21s.	10 Phenix, £5 1/2	10 Wheel Owles, £8.
Belmont, 21s.	50 Pestarena, 8s.	10 Wheel Jane, £5 1/2
Belmont, 21s.	20 Ruby, £4 5s.	10 Wheel Sisters, £4 8 9
Belmont, 21s.	20 Richmond, £13.	15 Wheel Unity, £5 1/2
Belmont, 21s.	50 Roma Grande, 5s. 3d.	20 W. Bassett, £4 1/2
Belmont, 21s.	5 Roman Gravel, £11 1/2	100 York Penin. Pri., 26s 3
Belmont, 21s.	10 Scottish Aust., £2 1/2	100 Ditto Ord., 7s. 6d.
Belmont, 21s.	50 S. Indian Gold, £2 16 3	

**RAILWAYS—SPECIAL BUSINESS.**

**FOREIGN BONDS—SPECIAL BUSINESS.**  
Fortnightly accounts opened on receipt of the usual cover.

**JAMES H. CROFTS, 1, FINCH LANE, LONDON.**  
ESTABLISHED 1842.

**R. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER.**  
44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

Business transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description. RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS. TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS. Accounts opened for the Fortnightly Settlement. A List of Investments free on application.

**R. W. H. BUMPUS has SPECIAL BUSINESS** in the undermentioned:—

Almada, 14s.	20 Eberhardt, £4 16s. 3d.	15 Polrose, £2 1/2
Bedford, 21s.	25 Flagstaff, 27s. 6d.	50 Parys Copper, 36s.
Belmont, 21s.	50 Frontino, £2 1/2	25 Phenix, £5 1/2
Belmont, 21s.	75 Glenroy, 27s. 6d.	40 Pandora, 18s. 9d.
Belmont, 21s.	30 Great Holway.	50 Port Phillip, 10s. 9d.
Belmont, 21s.	5 Great Laxey, £18 1/2	50 Panulicillo, £5 3s. 9d.
Belmont, 21s.	15 Herodfoot, £4 1/2	50 Ruby, £3 18s. 9d.
Belmont, 21s.	40 Hingston Down, 26s. 6	10 Roman Gravel, £11 1/2
Belmont, 21s.	50 Killifreth.	50 South Darren, £23 13 9
Belmont, 21s.	15 Mellanear, £5 1/2	50 S. E. Wynad, £2 1/2
Belmont, 21s.	20 Marke Valley, £2 1/2	20 Tamar, 26s. 6d.
Belmont, 21s.	50 Morfe Du, 28s. 6d.	10 W. Grenville, £2 1/2
Belmont, 21s.	30 N. Wh. Peavor.	50 West Kitty, 41s.
Belmont, 21s.	40 No. Herodfoot, 12s. 6d.	15 Wheel Sisters, £4 1/2
Belmont, 21s.	100 Nouveau Monde, 26s 6	40 West Phoenix, £2 1/2
Belmont, 21s.	50 New Quebrada, £4 1 3	50 West Asheton.
Belmont, 21s.	75 Pen-y-Orsedd.	50 West Holway.
Belmont, 21s.	40 Prince of Wales, 14s. 6	

**SPECIAL BUSINESS**, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others. The following Mines are particularly recommended:—

WHEEL GRENVILLE.	WHEEL PEEVOR.	WEST PEEVOR.
NEW PEEVOR.	WHEEL SISTERS.	WEST PHENIX.
PEN-Y-ORSEDD.	DERWENT.	SOUTH DARREN.

**WILLIAM HENRY BUMPUS, SWORN BROKER.**  
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

**MR. W. TREGELLAS, 19, BISHOPSGATE STREET WITHIN, E.C.**  
Deals in all descriptions of MINING SHARES at close market prices, and is in a position to do business in SANTA BARBARA, PITANGUI, COPIAPO, and BRAZILIAN GOLD MINES.

**BRAZILIAN GOLD MINES (LIMITED).**

WALTER TREGELLAS strongly recommends the immediate purchase of these shares. The company holds a series of extraordinarily rich gold mines, which on surface workings have yielded gold of the value of upwards of £150,000. The company likewise holds a mountain of "Jacotinga." The shares are £1, fully paid.

The Brazilian Gold Mines will be the great Gold Mining Prize of 1880. Full particulars on application.

**MR. GEORGE BUDGE, STOCK AND SHARE DEALER,**  
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ALL BUSINESS TRANSACTIONS FREE OF ANY CHARGE FOR COMMISSION.

**Notice to Investors and Speculators.**  
Mr. BUDGE has DEALINGS in:—  
20 East Chiverton.  
10 Grogwinow.  
35 Glenroy.  
50 Great Holway.  
100 Killifreth.  
50 Lady Ashburton.  
50 Lanrwst.  
40 New Peavor.  
100 West Holway.  
35 New Wye Valley.  
80 Pen-y-Orsedd.  
35 Prince of Wales.

**SPECIAL BUSINESS** in Foreign Shares as Buyer or Seller. Mr. BUDGE invites the attention of investors to the Wheel Coates Tin Mine, Agnes, and he strongly recommends the purchase of these shares—10s. paid, 2s. each. This mine is no speculation, as the reserves of tin enable Mr. BUDGE to state that in four months' time the mine will be making profits. See letter, page 276.

### STOCK AND SHARE MARKETS

Prices of STOCKS and SHARES in RAILWAYS, BANKS, ENGLISH and FOREIGN GOVERNMENT SECURITIES, GAS, MINES, INSURANCE, and other Stock Exchange Securities, and various important information forwarded on application to—

**Messrs. PETER WATSON AND CO.,**  
18, AUSTIN FRIARS,  
OLD BROAD STREET,  
LONDON, E.C.

BUYER and SELLER of SHARES at the close Market Price of the day. SHAREHOLDERS and INVESTORS may rely on all business being punctually and faithfully carried out.

A DAILY LIST OF PRICES sent (free) on application, either personally or by post. BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. PETER WATSON AND CO.'S**  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 815, Vol. XV., for FEBRUARY month, will shortly be ready, and will be sent to customers on application.

Annual Subscription..... 5s. Single Copy..... 6d.

**Messrs. PETER WATSON AND CO.,**  
18, AUSTIN FRIARS,  
OLD BROAD STREET,  
LONDON, E.C.

**MR. ALFRED E. COOKE,**  
DEALER at NET PRICES in EVERY DESCRIPTION of STOCKS and SHARES,  
76, OLD BROAD STREET, LONDON.  
ESTABLISHED 1853.

**TEMPORARY DEPRESSION.**—Advantage should AT ONCE be taken of the lower prices now ruling, and shares in ESTABLISHED and PROGRESSIVE Mines purchased. ALL SHARES supplied at LOWEST NET PRICE.

**STEADY LEAD SHARES.**—HERODFOOT, NORTH HERODFOOT, HERODSCOMBE, PORT NIGEL, and NORTH D'ERESBY MOUNTAIN.—Specially Recommended.

For RELIABLE and PROFITABLE ADVICE and CHEAP SHARES, EVERY BONA FIDE INVESTOR should send for the "INVESTOR'S GAZETTE," post free three stamps. New Number next Friday. Early application is necessary.

**SPECIAL NOTICE.**  
Mr. COOKE'S Offices adjoin both the Stock Exchange and Mining Market, but for the further convenience of clients they are now in telegraphic communication with the Stock Exchange.

**ALFRED E. COOKE,**  
76, OLD BROAD STREET, LONDON.  
(ESTABLISHED 1853)

Over 13 years at the above offices, adjoining the Stock Exchange and Mining Markets.

**STOCKS AND SHARES.**  
FOREIGN BONDS, TELEGRAPHS, RAILWAYS, and OTHER LEADING SECURITIES.

**MR. JAMES STOCKER, STOCKBROKER,**  
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1848.

**SPECIAL BUSINESS** in the following:—  
Almada Consolidated, 22s. 6d.  
Chontales, 8s. 9d.  
Consolidated, 18s.  
Derwent, 23s.  
Devon Great Cons., 13s.  
Don Pedro, 24s.  
E. Chiverton Cons., £2 1/2  
E. Rom. Gravel, 13s. 9d.  
East Lovell, £2 7s. 6d.  
East Caradon, £2 17s. 6d.  
East Crebor, 18s. 9d.  
Eberhardt, £4 16s. 3d.  
Exchequer, 9s. 3d.  
Flagstaff, £2 1/2  
Glenroy, 26s.

**BANKERS: LONDON AND WESTMINSTER.**

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,**  
37, WALBROOK, LONDON, E.C.

Business transacted at net prices in all kinds of Stocks and Shares. Information concerning various securities obtainable from all parts of the United Kingdom. Special Correspondents can be retained from all mining districts. Mines inspected and reported upon at most moderate charges.

Information obtained concerning such shares as are not dealt in on the Mining Market.

**ESTABLISHED 20 YEARS.—BANKERS: LONDON & SOUTH-WESTERN.**

**JOHN B. REYNOLDS, 37, WALBROOK, LONDON, E.C.,**  
gave as the result of his investigations strong recommendations for the purchase of the following SHARES, and the advance in each instance is correctly marked underneath since such recommendation was made. He predicts for WEST KITTY and other Mines an equal advantage to buyers:—

	Recommended at—per share.	Present price.
Dolcoath	£23 .. £25 ..	£60 .. £62 1/2
South Condurow	10 .. 10 1/2 ..	11 .. 12
Tincroft	5 .. 8 ..	21 .. 22
Mellanear	3 1/2 .. 4 ..	6 1/2 .. 6 1/2
Wheel Peavor	5 1/2 .. 6 1/2 ..	30 .. 31

Mr. REYNOLDS urges his numerous correspondents to telegraph their instructions with regard to any shares, and recommends them to BUY and SELL only for cash, especially in the leading mines, where fluctuations are so considerable. Mr. REYNOLDS attends personally to every branch of his business.

**THE RECENT GREAT ADVANCE IN MINING SHARES.**—Large profits were realised by those who bought up cheap shares in mines situated in the rich mineral centres, principally those around Camborne, Cornwall. This district is the richest for tin and copper in the world. The following mines illustrate this fact:—Dolcoath has returned in profit 2,000,000L., North Crofty 110,000L., Cook's Kitchen 300,000L., Tincroft 310,000L., East Pool 112,000L., Carn Brea, 300,000L., South Condurow 40,000L., North Bassett 110,000L., Wheel Bassett 350,000L., Wheel Buller, 400,000L., and Stray Park 300,000L.

The next great success of this rich group of mines will be CARN CAMBORNE, which is bounded on the north by Dolcoath, now selling for 300,000L., and on the south by South Condurow, now selling for 80,000L. Four valuable tin and copper lodes traverse Carn Camborne sett. One of these is Dolcoath's south tin lode, and another is Carn Brea's celebrated "Druid" copper lode, which returns enormous quantities of copper in that mine.

Dolcoath is half a mile deep, Carn Camborne is but 95 fms., and has already returned 175,000L. worth of copper. The present company get the entire benefit of the explorations made by former workers. The mine is divided into 6000 shares, and at their present price (2L. each) is selling for about the original cost of the plant, machinery, and buildings at surface.

For further particulars and to secure shares at 2L. each, immediate application to be made to Messrs. ENDEAN and Co., Mine Owners and Stock and Share Dealers, 85, Gracechurch-street, London, E.C.

Established 1861.—BANKERS: London and Westminster, Lothbury.

### THE "DIFFERENTIAL" PUMPING ENGINE (DAVEY'S PATENT).

FOR DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION, SUPPLYING DOCKS, PUMPING SEWAGE, AND GENERAL PUMPING PURPOSES

**HATHORN, DAVEY, AND CO.,**  
LEEDS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.

See Illustrated Advertisement every alternate week.

**NOTICE OF REMOVAL.**

**GRANVILLE SHARP,**  
32, QUEEN VICTORIA STREET, LONDON, E.C.

**MR. CHARLES THOMAS,**  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. ALFRED THOMAS,**  
MINING AGENT, AND STOCK AND SHARE DEALER,  
10, COLEMAN STREET, LONDON, E.C.

Second Edition, just published, price 6d.  
"HOW TO TAKE ADVANTAGE OF THE COMING RISE IN PRICES."

**MR. EDWARD ASHMEAD, 62, CORNHILL, LONDON,**  
LONDON MINE AGENT, ACCOUNTANT, AND AUDITOR.

TO INVESTORS, SHAREHOLDERS, TRUSTEES.  
SAFE DIVIDEND INVESTMENTS PAYING 4 TO 6 AND 10 PER CENT.  
PER ANNUM ON PRESENT OUTLAY.

**SHARP'S INVESTMENT CIRCULAR.**  
The MARCH EDITION (post free).  
SHOULD BE CONSULTED BY INVESTORS AND SHAREHOLDERS.

It is a Reliable "Guide," giving valuable information and Sound Advice, &c. It gives Market prices; Dividends upon outlay, when payable; Reports, &c., &c. IT CONTAINS ALL THE SAFE INVESTMENTS IN THE FOLLOWING:—  
English, Foreign Railways.  
Preference, Debenture Stocks.  
Indian, American Stocks.  
Bank, Financial Shares.  
Tramway, Telegraph Shares.  
Municipal Bonds.

Insurance, Gas, Waterworks.  
Colonial, Foreign Stocks.  
British, Foreign, Colonial Mines.  
Tea, Land Shares.  
Shipping, Dock Shares.  
Miscellaneous Shares, &c., &c.

**HENRY GOULD SHARP, STOCK AND SHARE BROKER,**  
42, POULTRY, LONDON, E.C.—ESTABLISHED 1852.

**BANKERS: LONDON AND WESTMINSTER, Lothbury, London, E.C.**

**Messrs. ENDEAN and CO., STOCK AND SHARE DEALERS,**  
85, GRACECHURCH STREET, LONDON, E.C.  
ESTABLISHED 1861.

**BANKERS: LONDON AND WESTMINSTER, Lothbury; and BARCLAY, BEVAN, and CO., Lombard-street, E.C.**

Messrs. ENDEAN and Co. strongly advise the purchase of well selected Lead Mines at present low prices:—Van, Great Laxey, Roman Gravel, Llanrwst, and Tamar, also South Wheel Crebor (Copper). The next great rise will be in Lead Shares, and many of those now offering will be eagerly sought after at considerably higher prices immediately there is a run upon them.

Messrs. ENDEAN and Co. are prepared to deal in all the shares they recommend at close prices.

Messrs. ENDEAN and Co. strongly advise the purchase of CARN CAMBORNE shares. This mine lies between Dolcoath and South Condurow; the former is selling for over £300,000, and the latter for nearly £20,000. Carn Camborne is in 6000 shares, now to be had for £2 each. Vigorous operations will be at once commenced, and there is every reason to believe that Carn Camborne will prove in depth as rich as any of the great mines by which it is surrounded. Shares are CERTAIN to have a considerable rise in price. Good sales of tin and copper will be commenced within one month after the mine is in full work.

**CHARLES J. SIMS, MINE OWNER, STOCK AND SHARE DEALER,**  
2, DRAPER'S GARDENS, THROGMORTON STREET, LONDON, E.C.

(Late of Tavistock, Devon, the centre of the Devon Consols District.)  
Special and reliable information and advice on the mines of Devon and Cornwall, and of the Llanrwst District.

Twenty-five years experience in Mining.  
Special information on Manganese Mines at home and abroad.  
All business entrusted to C. J. SIMS will have careful and prompt attention.

**FERDINAND R. KIRK, 5, BIRCHIN LANE, LONDON, E.C.**  
FORTNIGHTLY ACCOUNTS opened, on receipt of the usual "cover," in Railways Home and Foreign, Mining Shares, Foreign Bonds, and certain Miscellaneous Securities.

"THE WEEK"—A SEPARATE EDITION from that which appears in the Mining Journal is published every Wednesday evening, containing "Notes and Hints on the Stock Markets," with Closing Prices. May be had on application. BANKERS: LONDON AND WESTMINSTER, Lothbury.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,**  
29, BISHOPSGATE STREET, LONDON, E.C.

Can SELL the following SHARES at prices annexed:—  
50 Almada, 14s.  
30 Bedford, £1.  
30 Chontales, 8s. 9d.  
20 Colorado, £2 16s. 3d.  
50 Cambrian, £1 16s. 3d.  
25 Carnarvon, 25s.  
20 Carn Camborne, £2.  
10 Devon Consols, £13 10  
50 Don Pedro, £1 1/2  
20 East Caradon, £4 1 3  
10 East Van, £2 1/2  
20 Eberhardt, £4 1/2  
50 East Florida, 12s. 6d.  
20 Flagstaff, £3.

50 Prince of Wales, 15s.  
20 Roman Grav, £11 1/2  
100 Roma Grande, 5s. 6d.  
20 Ruby Silver, £4 1/2  
30 So. D'Ersey, 30s.  
50 So. Indian Gold.  
50 Tamar Sil.-Lead, £1 1/2  
25 Van & Glyn United, 18s. 9d.  
15 West Asheton, £7 1/2  
20 West Kitty, £2 2s 6d  
30 So. D'Ersey, 30s.  
20 Wheel Crebor, £2 1/2  
25 Wheel Jewell, £2 1/2

**BWLCH UNITED MINES—SPECIAL BUSINESS** in these shares. SOUTH WHEEL CREBOR (Limited), £1 fully paid, strongly recommended at £2.

**MR. E. J. BARTLETT, BRITISH AND FOREIGN STOCK AND SHARE DEALER,**  
No. 30, GREAT ST. HELEN'S, LONDON, E.C.  
PEN-Y-ORSEDD, GREAT HOLWAY, and WEST HOLWAY shares should have a great rise—rich courses of ore proved.

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"HOW TO INVEST," post free, One Shilling, Fourteenth Edition, much enlarged.

**FRANCIS FRANCIS,**  
MINING ENGINEER, STOCK AND SHARE DEALER,  
CORN EXCHANGE CHAMBERS, CHESTER.

**SPECIAL BUSINESS** in—HALKYN DISTRICT MINES DRAINAGE RHYDALUN, RHOSMOR, DEEP LEVEL, NORTH HENDRE, PEN-Y-ORSEDD, VRON, TYDDY-Y-GWYNT, and other Mining Properties in the Drainage areas. Also in PITANGUI, SANTA BARBARA, and other Brazilian Gold Mines.

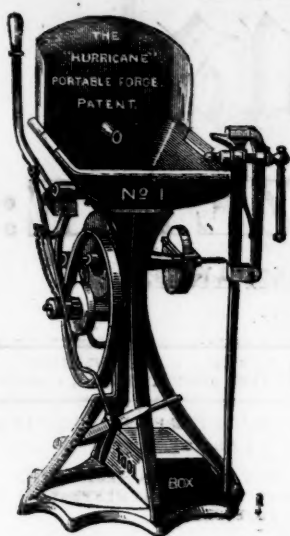
**MR. JOHN L. M. FRASER,**  
(Fourteen Years at the Great Miners' Mines)  
CONSULTING MINING ENGINEER, &c.,  
GREENFIELD HOUSE, WREXHAM.

Mines managed and Secretarial from £150 per annum. Inspections from £3 3s., and expenses.  
All descriptions of MINING PLANT and STORES at the lowest possible prices. Enquiries courted.

**BONA FIDE INVESTMENTS.**  
Shares can now be obtained that will pay from 4 to 10 per cent. A select list from personal inspections on application.



A COMPLETE, PORTABLE, AND EFFICIENT SMITHY FOR £7 7s.



# THE "HURRICANE" PORTABLE FORGE

(HARDINGE'S PATENT).

A Complete and Portable Smithy, possessing a Powerful Blast, a Forge, a Hearth, a Vice, an Anvil, a Rivetter's Hearth,



a Brazier's Hearth, a Mine Ventilating Apparatus, a Tool Grinder (Emery), a Cutter, a Circular Saw and Bench, a Polishing Wheel, a Chuck, Two Drills, a Drill Rest, and a Tool Box.



PATENTED IN EUROPE AND AMERICA.

The "HURRICANE" Patent Portable Forges possess advantages unobtainable with Forges of any other description. They commend themselves to the world, not only as being complete and portable Smithies and mine and ship ventilators of the highest practical value, but also for the extreme ease with which they are worked, the simplicity and compactness of their construction, and the steady continuous blast, which speedily creates an unusually high degree of heat. The "Hurricane" Portable Forges are made in nine distinct sizes, embrace attachments which form a complete smithy, and are suitable for all purposes in all climates.

The Rivetter's Hearth is readily connected to the nozzle of the forge by means of a flexible tube, and can be used in any awkward position for keeping rivets hot and close to the work. The Brazier's Hearth is similarly worked, but is constructed with a nozzle on opposite sides for producing heat equally on both sides of the work, and is particularly adapted for brazing band saws, &c. Hand Blowers for all ventilating purposes, and for fixed blacksmiths' hearths, are made on a new principle.

The Lever Handle can be used at any angle, or taken off altogether, and the Treadle used instead. There is a Recovering Spring to raise the Handle or Treadle. This arrangement secures all the easy motion of the old-fashioned bellows, is worked with much less effort than the Rotary Hand Wheel, and there are no Leather Bands to be burnt, no Cranks, and consequently no "Dead Centres." Three larger sizes than those given below are kept in stock.

A 1-INCH BAR OF IRON CAN BE RAISED TO A WELDING HEAT IN TWO-AND-A-HALF MINUTES.

PRICES.	
No. 0.—THE AMATEURS', JEWELLERS', OR DENTISTS' FORGE AND WORKSHOP, 3 ft. by 1 ft. 6 in., and 2 ft. 8 in. high, fitted as a complete Smithy, including Forge, 6-in. patent Fan Blast, Hearth, Parallel, Vice with Anvil, Emery Wheel, Chuck, 2 Drills, a Cutter, Polishing Wheel, Crucible and Tongs, Ladle, Spanners, Drawers, Treadle and Flexible Band, Automatic Clutch, &c., &c. Weight, 84 lbs. Muffler, for conveying the smoke to chimney, 15s. extra.	£8 8s. 0d.
No. 1.—FORGE, HEARTH (lined with fire-brick), and PAN 18 in. square, 2 ft. 7 in. high. Weight 132 lbs., with 8-in. patent Fan Blast, Spanners, and Emery Tool Grinder, complete, on standard.	£5 15s. 0d.
<i>If also fitted with a 2½-in. Vice and Anvil combined 25s. extra. Muffler, 15s. extra. Extra friction wheels, 1s. each.</i>	
No. 2.—DITTO DITTO. Weight, 156 lbs. Fitted with 2½-in. Vice with Anvil, 4-in. Emery Wheel or Grindstone, Chuck, Cutter, and two Drills, a Buffing Wheel or Polisher, Spanner, Tool Chest, Lock and Key, &c. Lever and Treadle. Muffler, 15s. extra.	£7 7s. 0d.
No. 3.—FORGE AND HEARTH, 26 in. by 34 in. Weight, 160 lbs.: 10-in. patent Fan Blast, Spanners, and 5-in. Emery Wheel, complete on frame with four legs and two travelling wheels. Lever and Treadle.	£8 8s. 0d.
<i>If fitted with a 3-in. Vice and Anvil, 25s. 6d. extra. Hood, 21s. extra. Muffler, 35s. extra.</i>	
No. 4.—DITTO DITTO. Weight, 184 lbs. Fitted with Two Travelling Wheels, 5-in. Circular Saw and Bench, and all the attachments of No. 2 Forge, but increased in suitable proportions. Hood, 21s. extra. Muffler, 35s. extra.	£10 10s. 0d.
No. 5.—FORGE AND HEARTH, 30 in. by 42 in. Weight, 250 lbs. With 12-in. patent Fan Blast, Spanners, and 6-in. Emery Wheel, complete on frame with four legs. Fitted with Lever Treadle, Two Travelling Wheels, and Fast and Loose Pulleys for power.	£12 12s. 0d.
<i>If fitted with a 3½-in. Vice and Anvil, 32s. extra. Hood, 30s. extra. Muffler, 42s. extra.</i>	
No. 6.—DITTO DITTO. Weight, 280 lbs. Fitted with all the attachments of Nos. 2 and 4 Forges, but proportionately increased in size. Hood, 30s. extra. Muffler, 42s. extra.	£15 15s. 0d.
<i>Rivettors' Hearths, 15 in. by 15 in., 21s. Braziers' Hearths, 15 in. by 15 in., 27s. 6d. Union and Sockets for 1½-in. tube, 12s. 6d. Flexible Tubing, 1½-in., 1s. 6d. per foot.</i>	

PORTABLE FORGES.—By far the most comprehensive and complete arrangement we have ever seen for its purpose is the "Hurricane" Forge. It would appear that the inventor and patentee had foreseen and provided for every contingency which could possibly arise in connection with smithy work in this *multum in parvo* forge. In small compass, and at small cost, the contractor, engineer, boiler-maker, ironmonger, gasfitter, and many other employers of labour have in it an invaluable assistant, whilst to Colonists its companionship is indispensable. We predict for the "Hurricane" Forge unlimited success.

For Drawings, Prices of Larger Sizes, Trade and Export Terms, Testimonials, Agencies, and Licenses to Manufacture apply to—

THE "HURRICANE" PORTABLE FORGE CO.,  
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FOR CONVEYING  
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SAFETY FUSE  
FIRE TO THE  
BLASTING ROCKS, &c.

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1852 and 1874, in London; at the "IMPERIAL EXHIBITION" held in Paris in 1855; at the "INTERNATIONAL EXHIBITION" in Dublin, 1855; at the "UNIVERSAL EXHIBITION" in Paris, 1867; at the "GREAT INDUSTRIAL EXHIBITION" at Altona, in 1869; TWO MEDALS at the "UNIVERSAL EXHIBITION," Vienna, in 1873; and at the "EXPOSICION NACIONAL ARGENTINA," Cordova, South America, 1872.



BICKFORD, SMITH, AND CO.,  
of TUCKINGMILL, CORNWALL, ADELPHI  
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POOL, and 55, GRACECHURCH STREET, LONDON,  
E.C. MANUFACTURERS AND ORIGINAL  
PATENTEES OF SAFETY FUSE, having been in-  
formed that the name of their firm has been attached to  
fuse not of their manufacture, beg to call the attention of  
the trade and public to the following announcement:—

EVERY COIL OF FUSE MANUFACTURED by them has TWO SEPARATE  
THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, and BICK-  
FORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as  
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WEST OF ENGLAND GUNPOWDER COMPANY,

SOLE MANUFACTURERS OF THE  
SAPMSON AND LANYON SPORTING GUNPOWDER.  
MR. LANYON, Manager.  
London Offices: St. Michael's House, Cornhill, E.C.

BENNETTS' SAFETY FUSE WORKS,  
ROSKEAR, CAMBORNE, CORNWALL.

BLASTING FUSE FOR MINING AND ENGINEERING  
PURPOSES

Suitable for Wet or Dry Ground, and effective in Tropical or Polar Climates.

W. BENNETTS, having had many years' experience as Chief Engineer with  
Messrs. Bickford, Smith, and Co., is now enabled to offer Fuse of every variety  
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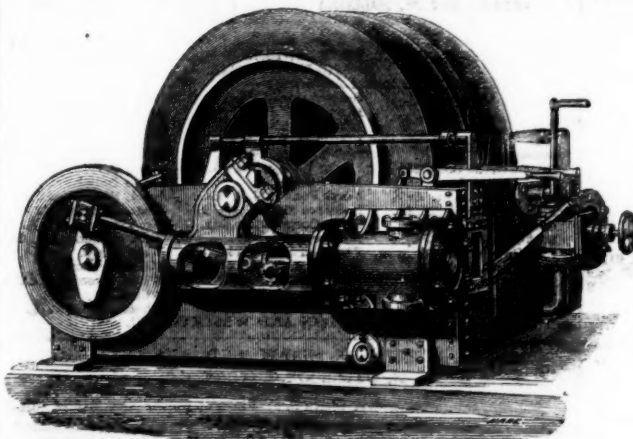
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Late the MOLD FOUNDRY COMPANY. Established 1838.)

MAKERS OF  
MINING MACHINERY,  
CORNISH PUMPING, WINDING, AND EVERY OTHER DESCRIPTIVE  
OF ENGINE,  
PITWORK, BOILERS, FORGINGS,  
WATER-WHEELS, ORE CRUSHING, STAMPING, AND DRESS  
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ROCK DRILLS, AIR COMPRESSING ENGINES, and all the  
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SPECIAL ATTENTION given to MACHINERY for FOREIGN MINES.  
SECOND-HAND MINING MACHINERY FOR SALE.  
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CWM FRYF MINES (LIMITED).—Has FOR SALE, ONE THOUSAND  
BARS at par, £1.

## STEVENS' UNDERGROUND WINDING ENGINE,

DESIGNED FOR USE COMPRESSED AIR OR STEAM.



SIMPLE, COMPACT, PORTABLE.

Silver Medal, Royal Cornwall Polytechnic Society, 1876.

No. 1 size, 7 in. single cylinder, with 2 ft. drums.  
No. 2 size, 9 in. single cylinder, 2 ft. 6 in. drums.  
A, — 6 in. double cylinder, with 2 ft. 3 in. drums.  
B, — 8 in. " " 3 ft. 0 in. drums.  
C, — 10 in. " " 3 ft. 6 in. drums.  
D, — 12 in. " " 4 ft. 6 in. drums.  
E, — 14 in. " " 5 ft. 0 in. drums.

MANUFACTURED BY  
THE USKSID CO.,  
ENGINEERS, MAKERS OF PUMPING AND WINDING  
MACHINERY, AND FORGINGS OF EVERY  
DESCRIPTION.

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Agents for the six Northern Counties—  
TANGYE BROTHERS, ST. NICHOLAS BUILDINGS,  
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[This Advertisement appears fortnightly.]

## WILLIAM EDWARDS AND SON, Griffin Works, Wolverhampton,

MANUFACTURERS OF

Edge Tools, Spades and Shovels. Hand, Sledge, Stone Quarry, and Mining Hammers,  
Railway Contractors' and Mining Tools. Axes, Adzes, Pickaxes, Crow and Boring  
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The Original and Only Manufacturers of Best Crown Quality of Horse Shoes

PATENTEES AND MANUFACTURERS OF PATENT PUNCHED EYE PICKAXES, HORSE HAMMERS ADZES, and other TOOLS  
Under Patent No. 4698.

## "TANNIC GELATINE,"

For REMOVING and PREVENTING INCRUSTATION of every  
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MANUFACTURED ONLY BY

WILLIAM RICHARDSON,  
GAS AND HYDRAULIC ENGINEER,

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## THE IRON AND COAL TRADES' REVIEW

The IRON AND COAL TRADES' REVIEW is extensively circulated amongst the  
Iron Producers, Manufacturers, and Consumers, Coalowners, &c., in all the iron  
and coal districts. It is, therefore, one of the leading organs for advertising every  
description of Iron Manufactures, Machinery, New Inventions, and all matters  
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By a special method of preparation this leather is made solid, perfectly close in  
texture and impermeable to water; it has, therefore, all the qualifications essen-  
tial for pump buckets, and is the most durable material of which they can be  
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HEPBURN AND GALE,  
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Prize Medals, 1851, 1855, 1862, for  
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.



The List of Applications for Shares will be closed on THURSDAY, the 11th of MARCH.

Issue of 20,000 Preference Shares of £1 each, bearing Interest at the rate of Ten per Cent. per annum, payable half-yearly, with the option of exchanging such Shares into Ordinary Shares of the company at any time within a period of two years at the option of the holder, and 20,000 Ordinary Shares of £1 each of

# The Pierrefitte Mining Company, Limited.

Registered under the Joint Stock Companies Acts of 1862 and 1867, which Limit the Liability of Shareholders to the amount of their shares.

CAPITAL £100,000, IN SHARES OF £1 EACH,

80,000 ORDINARY SHARES AND 20,000 PREFERENCE SHARES.

(The greater part of the latter has already been subscribed for.)

Five Shillings per Share to be paid on Application and Five Shillings on Allotment. The Balance by calls if required, but no Call will exceed Five Shillings per Share, nor be made at intervals of less than Three Months.

SHOULD NO ALLOTMENT BE MADE, THE DEPOSITS WILL BE RETURNED WITHOUT DEDUCTION

## DIRECTORS.

Alderman Sir THOMAS DAKIN (Chairman), Cree Church Lane, E.C.  
BUXTON SHILLITOE, Esq., Frederick-place, Old Jewry, E.C.  
WILLIAM STANDING, Esq., Metropolitan Buildings, Queen Victoria-street, E.C.  
WILLIAM GROVER ASHBY, Esq., St. John's-terrace, Hove, Brighton.  
JOSEPH RUTTER, Esq., M.D., Codrington House, Brighton.

Directors of the  
Sentine Mining Company  
(Limited).

## BANKERS.

Messrs. DIMSDALE, FOWLER, BARNARD, AND DIMSDALES, 50, Cornhill, E.C.

## SOLICITORS.

Messrs. BILLINGHURST AND WOOD, 7, Bucklersbury, E.C.

## SECRETARY.

Mr. J. R. COOMBS.

OFFICES—14, GREAT WINCHESTER STREET, E.C.

## WORKING COST.

80 miners, including materials, at £5 per man per month	£480 0 0
25 months	12000 0 0
Carriage of 975 tons of ore from the mine to the dressing-floor per month at (say) 2s. per ton	97 10 0
Dressing 875 tons of ore per month at (say) 4s. per ton	175 0 0
Timber, coals, iron, stores, &c. (say)	200 0 0
Management at the mine, including chief mining captain, dresser, assayer, clerk, &c. (say)	85 0 0
Carriage of 220 tons of ore from dressing-floor to Bordeaux, and freight thence to England, at 30s. per ton	480 0 0
Carriage of 250 tons of blende to Bordeaux and freight thence to England, at 25s. per ton	312 10 0
London expenses, including directors' remuneration, secretary's salary, office expenses, &c.	70 0 0
Incidentals, including taxes, travelling expenses, &c., &c.	80 0 0
	2,080 0 0
Net profit per month	£3,320 0 0

Or £39,840 per annum, equivalent to a yearly dividend of nearly 40 per cent. on the capital of the company, by the work of 80 miners only, whereas by increasing the number of men it is confidently believed that the profit to be realised from working this mine alone will greatly exceed the above estimates.

The only contracts entered into are as follows:—(1.) An Agreement signed in Paris, dated the 15th day of October, 1879, made between Alfred Long Jeffrey and the representatives of the late Marquis de Querrieu and of the Compagnie Royale Asturienne. (2.) Articles of Agreement dated the 11th day of November, 1879, between Alfred Long Jeffrey, of the one part, and Sir Thomas Dakin, Buxton Shillitoe, Joseph Rutter, William Grover Ashby, William Munton Bullivant, William Standing, William Widdison, Arthur Robert Marten, Harry Povah Bellamy Smith, Thomas Parker Caldicott, and James Robert Coombs, of the other part. (3.) Purchase Contract or Conveyance dated the 15th day of November, 1879, made between the Marquis de Querrieu and Prince Rohan de Rochefort, of the one part, and Alfred Long Jeffrey, Sir Thomas Dakin, Buxton Shillitoe, and William Standing, of the other part. (4.) Another Purchase Contract or Conveyance dated the 18th day of November, 1879, made between the Compagnie Royale Asturienne, of the one part, and Alfred Long Jeffrey, Sir Thomas Dakin, Buxton Shillitoe, and William Standing, of the other part. (5.) An Agreement dated the 2nd day of February, 1880, made between the said Alfred Long Jeffrey, Sir Thomas Dakin, Buxton Shillitoe, and William Standing, for and on behalf of themselves and the other parties interested, of the one part, and the said James Robert Coombs as a trustee for and on behalf of the company, of the other part. The agreements numbered 2 and 5 have been filed with the Registrar of Joint Stock Companies, and copies of any of the documents and the Prospectus of Association can be inspected on application to the solicitors of the company.

Prospectuses and reports, with plans of the various concessions, and forms of application for shares, may be had of the bankers, solicitors, and secretary, and samples of the ore may be seen at the offices of the company.  
Dated 25th day of February, 1880.

## PIERREFITTE SILVER-LEAD AND BLENDE MINE.

GENTLEMEN,—This valuable mine, and the other properties thereto belonging, I carefully and thoroughly inspected on the 25th ult. The mine is situated on a spur of the Pyrenees, rising from the beautiful and picturesque town of Pierrefitte, located in a fertile luxuriant valley of said mountain chain. The direction of the main lode is parallel with the rise of the mountain—about west by north. Its back, being denuded of covering matter, can be traced, and is most conspicuously seen for a considerable distance up the mountain ridge. It is of gigantic width and strength, retaining its dimensions to the bottom of the mine, and is capable of yielding 6, 8, and in places 10 or more tons of silver-lead ore and blende to the fathom.

The mine has been opened, or its levels and excavations extended, to a length of over 100 fms., but only to a depth of about 25 fms. reckoned on the incline of the mine, the bottom being the richest part. The mine was worked during a period of only six years, and I was informed that 10,000 tons of ore, picked or culled, but without having undergone any process of cleansing was, within this comparatively short time, sent from the mine to the smelting furnaces; that a truck of 10 tons was daily despatched, and that such were the facilities of transit, that in 48 hours from the ore leaving the mine it was undergoing the process of smelting.

At the end or terminus of the wire rope, which is at the main road leading to and from Pierrefitte, I compute that there is now lying 4000 tons of lead and zinc ores, and at respective stations of the rope, up at the mine, I should say that there is the united quantity of 6000 tons, making together an entire quantity of lead ore and blende of 10,000 tons, now ready and waiting to be utilised, to be crushed and cleansed for market. These ores I should estimate to yield at least 2000 tons of lead ore and 4000 tons of blende, and which, together, even at the present price, should be worth at least £40,000. For the reduction and preparation of these ores for market crushing and dressing appliances will have to be erected.

Wishing rather to be under than over in my calculation of the extracted lead ore, I have called it, as you see, 2000 tons, and its value at £12 a ton = £24,000, allowing £4 a ton for the blende, but when I tell you that 5 samples of the ore, analysed in my presence, gave of metallic lead an average of 68 per cent., and of silver 55 ozs. to the ton of ore, you will not fail to think that it appears evident that my estimate is too low.

Everything on the mine having been left in working order, and the well-built, spacious, and convenient houses, of which there are several, all in perfect condition, tramways, and so on, evince, even were there no other data, the suddenness with which the miners ceased to work, and which was about two years ago. From appearances it would seem as though they had dropped their tools, at once

left the mine, and went home, leaving three men in charge of the property, and who are still there.

To cease to work such a mine in such a way would seem to be unprecedented; but the following is stated to be the cause of this extraordinary act:—It—that is, the mine—was held and worked by a company on lease, but contemplating the laying out of a large sum in the erection of an extensive dressing-floor, wished to purchase it; their offers were, however, refused, consequently they declined to continue their lease, involving a royalty of 20 per cent. on the gross returns of the lead, and of 15 per cent. on the blende.

On the resumption of the working of the mine, the quantity of ore to be extracted would seem to depend upon the number of miners employed.

In the concession, which has an area of about 20 square kilometres, or over 12 square miles, there are other lodes, one of which is of great promise, and, as a part of the property, there is a piece (10 acres) of fertile freehold land adjacent to the town of Pierrefitte, and which was purchased by the workers of the mine, with the intention of erecting on it the necessary dressing apparatus, for which purpose the preliminaries were begun, but, from appearances, were no less abruptly abandoned than the mine itself. Instead, however, of erecting dressing machinery on this land, and of laying it out for the purpose designed, I think it probable that the dressing-floor, with the necessary adjuncts, may be conveniently laid out and fixed at the bottom or terminus of the wire rope—adjacent to which there are two sources, whence an abundant and never-failing supply of water, suitable and sufficient for all purposes can at easy cost be obtained—the place intended for them, as before described, by the former workers of the mine, being somewhat distant from it. The wire rope, which is still securely fixed to its place as when in use, can, with trifling repairs, be made capable of conveying down from the mine 10 or 15 tons a day, but with a new and larger one up to 100 tons could be sent down.

It is seldom, indeed, that during my long course of mining experience, I have seen such a mine as the Pierrefitte Mine offered for sale, and I hesitate not to say that, in my opinion, it is a most valuable property—a property the acquisition of which is much to be desired, and which by proper and active working, will, I fully believe, answer the highest reasonable expectation of whoever may invest his money therein. Looking at the great width and strength of the lode, at its hard, close, compact nature, and at the infantile state of the mine as to depth, it may reasonably be inferred that no living man will see its exhaustion. The distance of the mine from the Pierrefitte Station of the Paris and Bordeaux Railway is about two miles, and the expense of carriage will not exceed 2s. 6d. a ton. From the station to Bordeaux (the shipping port) say 15s. From Bordeaux to Liverpool, freight 12s. to 12s. 6d. a ton, making a total cost, per ton (from the mine to Liverpool) 33s. From the mine to Swansea 5s. less.

JOHN LEAN, M.E.

To the Directors of the Pierrefitte Mining Company (Limited).  
P.S.—The following is a copy of certificate of assays of the ore, made by Dr. Morgan, public analyst, of Swansea. The samples were taken in my presence from different parts of the lode.

	Lead per cent. of ore.	Silver, ozs. per ton of ore.
No. 1	76.94	58.13
No. 2	36.36	18.71
No. 3	57.39	23.50
No. 4	73.60	58.48
No. 5	60.21	44.09

It will be seen that the average is—of lead 60.90 per cent., and of silver 40.57 ozs. per ton of ore, and two samples of blende yielded of metallic zinc 55.30 and 50.45 per cent. respectively.  
J. L.

## THE PIERREFITTE MINING COMPANY (LIMITED).

Capital £100,000, in 100,000 Shares of £1 each.  
OFFICES—14, GREAT WINCHESTER STREET, LONDON, E.C.

## APPLICATION FOR SHARES.

(This part to be retained by the Bankers.)

To the Directors of the Pierrefitte Mining Company (Limited).

GENTLEMEN,—Having paid to your Bankers the sum of £..... being the deposit of 5s. per share, I request you to allot to me ..... preference shares of £1 each in the Pierrefitte Mining Company (Limited), and I hereby agree to accept such shares, or any less number that may be allotted to me, and to pay the further sum of 5s. per share on allotment, and I request you to enter my name on the register of the company for the number of shares so allotted.  
Name in full .....  
Profession or description .....  
Residence in full .....  
Usual signature .....  
Date ..... 1880

## THE PIERREFITTE MINING COMPANY (LIMITED).

Capital £100,000, in 100,000 Shares of £1 each.  
OFFICES—14, GREAT WINCHESTER STREET, LONDON, E.C.

## DEPOSIT UPON APPLICATION.

## BANKERS' RECEIPT.

Received the ..... day of ..... 1880, on account of the directors of the Pierrefitte Mining Company (Limited), the sum of ..... pounds ..... shillings, being the deposit of five shillings per share on an application for an allotment of ..... ordinary shares in the above company.

For DIMSDALE, FOWLER, BARNARD, AND DIMSDALES,

£ : :

## Registration of New Companies.

The following joint-stock companies have been duly registered:—

EMPIRE GOLD MINING COMPANY (Limited).—Capital 250,000£. in shares of 2£. To carry out an agreement made between J. R. Burrows and F. Andrews of the one part and W. Dunlop of the other part, to purchase and work certain mines, veins, lodes of minerals situate in Summit mining district, Rio Grande county, State of Colorado, United States, known as the Empire Lode, with power to acquire any other mining properties and rights; to erect machinery, furnaces, mills, and other appliances for smelting, refining, crushing, or otherwise dressing the ores and minerals. The subscribers (who take one share each) are—W. H. Merriks, 4, Addison Gardens North, gentleman; E. H. Baydon, 2, Norland-place, stockbroker; G. Potter, Gunnersbury, stockdealer; J. Neuberott, South Norwood, stockbroker; P. Postlewhite, Shepherd's Bush, sharedealer; A. L. Edwards, North Finchley, stockbroker; E. J. Dowlen, 107, Isledon-road, lead smelter.

THE PENARTH IRON AND STEEL COMPANY (Limited).—Capital 50,000£. in shares of 50£. To manufacture for sale ores, minerals, and

metals of all descriptions. The subscribers (who take one share each) are—F. Monks, Warrington; C. C. Dunkerley, Manchester; T. Hall, jun., Warrington; W. Fletcher, Whitley; J. Pimlott, Burley; J. H. Knowles, Cwmbran; B. Wallace, Cwmbran.

THE KING'S LYNN COFFEE TAVERN COMPANY (Limited).—Capital 5000£. in shares of 1£. To carry on the business of a coffee tavern company in all its branches. The subscribers are—F. J. C. Barker, King's Lynn, 50; C. H. Ayll, King's Lynn, 25; J. T. Cook, King's Lynn, 20; H. A. Leake, King's Lynn, 50; W. Thompson, King's Lynn, 20; H. Wenright, King's Lynn, 10; W. Hitchcock, Gaywood, 20.

THE LEAMINGTON AND WARWICK TRAMWAYS AND OMNIBUS COMPANY (Limited).—Capital 25,000£. in shares of 10£. To construct, maintain, and work tramways and omnibuses. The subscribers are—J. Watts, Birmingham, 20; E. Pritchard, Birmingham, 20; J. Gilbert, Birmingham, 20; R. S. Gold, Warwick, 20; J. Woodward, Leamington, 20; E. Carter, Birmingham, 5; E. H. Carter, Birmingham, 5.

THE CANADIAN SALMON COMPANY (Limited).—Capital 50,000£. in shares of 5£. To carry on the business of preparing and exporting fish, poultry, and other food produce. The subscribers are—

J. Draper, 22, Great Winchester-street, 10; E. Phillips, Reading, 3; W. M. Wilkinson, 44, Lincoln's Inn-fields, 3; H. Leslie, 1, Frederick-place, 3; W. C. Davis, 30, Milk-street, 3; H. W. King, Beckenham, 3; A. C. Macdougall, St. John, New Brunswick, 3.

THE OLDHAM JOINT-STOCK BANK (Limited).—Capital 500,000£. in shares of 25£. To carry on the business of bankers in all its branches. The subscribers (who take 10 shares each) are—J. Clegg, High Crompton; W. Lees, Oldham; W. F. Milner, Oldham; J. Lees, Oldham; J. M. Cheetham, Manchester; J. T. Clegg, High Crompton; A. Crompton, Oldham; J. Crompton, High Crompton; A. Mellor, Rochester; W. Wrigby, Oldham; J. W. Clegg, Oldham; E. Collinge, Oldham; J. Taylor, Oldham.

LYNNVI AND TONDU COMPANY (Limited).—Capital 258,000£. in 17,200 preference shares of 5£., and 8600 ordinary shares of 20£. To carry out an agreement for the purchase of the liquidation of Lynnvi and Tondu and Ogmogre Coal and Iron Company (Limited), upon terms sanctioned by the Court of Chancery. To purchase or otherwise acquire any other coal, iron, and other mines, minerals, &c. To carry on the business of coal and ironmasters, smelters, engineers, ironfounders, and contractors for coal, coke, iron, or ironwork in all the branches of such business. To make and sell railway and other











## Mining Correspondence.

## BRITISH MINES.

# The Best Speculation, and the Cheapest Share in the Market is WEST DEVON GREAT CONSOLS,

The adjoining Mine to the Celebrated Devon Great Consols, where each £1 Share

went to £600 in value, and paid some £1200 in Dividends, whose identical South Lode it is discovered runs into West Devon Great Consols, from the back of which Splendid Copper Ore has been broken this week.

## WEST DEVON GREAT CONSOLS

The Shares are dealt in on the Market by all the principal Dealers.

The quotation has already advanced as we predicted to 40s. to 42s. 6d. per Share, and will go higher. We are prepared to buy back all Shares sold by us at 25s.

J. SCOTT & CO.,  
Palmerston Buildings,  
Old Broad Street,  
E.C.

The importance of this property, only separated from its celebrated neighbour by the "Tamar," will be best seen by a brief description, which can be had from us on application. These Shares are very cheap, as many mining experts believe they will advance immensely—and on the Market the sum of Ten Shillings per Share has been offered for the option of "calling" the Shares at the price of £5 each for the end of June next.

**ABERLYN.**—John Roberts, March 3: The valley cross-cut has crossing the level some nice branches of carbonate of lime mixed with strong lead. These branches are dipping into the lode, and will no doubt serve as feeders to it. All the other points are much the same as reported last week.

**BEDFORD UNITED.**—R. Goldworthy, March 3: No lode has been taken down in the 138 fm. level east since last report. The lode in the 115 fm. level east is 2 ft. wide, worth 9s. per fathom. In the winze sinking in the bottom of this level the lode is 2 ft. 6 in. wide, worth 10s. per fathom. The stopes are producing their usual quantity of ore. No other change to notice.

**BELL VEAN.**—James Bray, Feb. 28: During the past week we have met with a branch in the cross-cut about 6 in. wide, composed of capel and spar, with good spots of tin, but not enough to value. In the past month the men have fixed the air machine and pipes, and driven 7 ft. in the cross-cut. According to your instructions I shall put six men in the cross-cut next month to push on the same with all possible speed.

**BETTS-Y-COED.**—M. H. Whitford, March 4: There is no alteration to report since my last. We are pushing ahead with all speed the 30 east and the adit level.

**BLUE HILLS.**—S. Bennetts, Stephen Davey, Feb. 28: The lode in the 42 west end from the Blue Barrow shaft is 1 ft. wide, and worth 5s. to 6s. per fathom, and in the east end it is producing some good stones of tin, but is somewhat unsettled. The 30 east end is worth 10s. to 12s. per fathom, and the rise above this level is worth 13s. per fathom. The 20 east end has just cut the south or leading part of the lode, but is not as yet through it. So far as seen it looks promising and contains tin stuff.

**BODIDRIS.**—H. Hotchkiss, March 2: There is nothing new in our underground works calling for any special remarks; all points are being urged forward with speed. I have let the meadow shaft sink below the 45 to nine miners and two banksmen, at 16s. per fathom for 10 fms., who, if they complete by June 5 next, are to receive a bonus of 5s.

**BWLCH UNITED.**—N. Bray, Feb. 28: Good progress continues to be made in Ritchie's shaft, which is now down 2 fms. below the 100: sinking by nine men, at 17s. per fathom. The 100, east of Ritchie's, is set at 6s. per fathom. Lode large and kindly, with a little lead ore, but not in paying quantities. The 50 is set to six men, at 8s. per fathom; at present the lode is not so promising as usual, owing to its being broken by cross measures and clay joints, but good progress is being made, and I hope the driving will soon reach an improvement. The rise in the roof of the 70 is set to six men, at 7s. 10s. per fathom, and has improved for lead ore, and will further improve as it nears the stoping ground. The stope near the winze between the 60 and 70 is set at 55s. per fathom. The walls of the crusher-wheel pit are near completion, and after which the masons will commence walling round the large plunger and other work. The weather is fine, and all work going on satisfactorily.

**CARNARVON COPPER.**—J. Roberts, March 2: The water-wheel and rods at the old shaft are working well, and have forked from 6 to 7 fms. Considering the amount of rain, and the large space that there is containing the water, I consider this fair progress. Unfortunately, the bucket rod of the top lift in the new shaft has broken; and the pumps being so small, the rods got jammed in trying to get the broken ones out. In order to overcome this we shall wind out the water with the winch till we get down to the door. This will draw out the water faster than pumps would of themselves, so I do not anticipate that this will hinder us long. We are repairing the pulley stands and water-wheel, and, all being well, we shall be able to start them on Monday.

**CLEMENTINA.**—J. Roberts, W. Sandoe, March 3: At the 34 fm. level we have been rising towards the old sump in the bottom of the 15, to the north of the engine-shaft. We have got up about 3 fms. We have had a very nice lode, but it is pinched a little in the extreme top of the rise; as the lode is subject to these little changes, we do not think this of so much importance, and especially as the lode in the sump above is improving, and now down about 5 fms. from the 15, and within 10 fms. of the back of the rise. We are hoping that when we hole these we shall have a good piece of lead ground to take away. The lode generally is tolerably open, and will be comparatively cheap for stoping. We are now sinking below the 25, south of shaft, by two men, and the lode looks very kindly, with a branch of lead about 3 in. wide. The incessant rain we have had during the past month has kept the water in the bottom of the Roadside shaft.

**COMBARTIN.**—J. Harris, J. Comer, March 4: The lode in the winze sinking below the adit level is from 4 to 5 ft. wide, and showing good spots of lead, blende, and munda, embedded in floukan, &c., altogether a very pretty looking lode for the production of lead when we get deeper. The lode in the north-west end on the south counter lode is from 3 to 4 ft. wide, containing good-looking quartz and floukan associated with gossan, in which we find good lead, munda, and spots of copper ore; a very kindly lode. This lode, it is said, produced large quantities of good lead ore in the former working of the mine, west of Knight's cross-course, which we calculate is some 50 or 60 fms. west of our adit cross-cut, and the old workers say there was nothing done east of Knight's cross-cut. We think there may be a good chance with this cross-course, and the ground is lead in our development of this lode east of this cross-course, and the position is easy for drainage. The water at the 17 is 1 ft. above the back of the level.

**DENBIGHSHIRE CONSOLIDATED.**—R. Prince, A. Thomas, March 4: In the north cross-cut out of the 112 we believe we shall shortly intersect the main lode; the beds of rock are commencing to dip. Should the lode be found rich at this point, the value of the mine will be greatly enhanced. The 112 east main lode continues to improve in character as we advance on its course. Stoping operations in the 68 continue as fast as time permits. In the south cross-cut we drove a hole with boring machine 3 ft. in the forebore, resulting, I think, in finding another joint; for when this 3 ft. was accomplished we had a sudden change from hard to soft ground, and a small stream of water also flowed from the hole. The men are now hard at work driving, and the result will be known in about a week's time. We have been busy on the dressing floor, and shall sell and deliver a further parcel of lead, weighing 10 tons, on Saturday.

**DERESBY CONSOLS.**—J. Roberts, W. Sandoe, March 3: We have no change to report since last week, except the groove on the Gwladus heading.

**DERESBY MOUNTAIN.**—J. Roberts, W. Sandoe, March 3: Monthly Report: During the last month but little change indeed has taken place in the No. 5, either in the sump or stopes. We have had to take away some of the poorer parts of the lode, in order to make advantage for working. Of course, in a lode so very wide we cannot expect to find it uniformly good throughout, yet still the poorer parts must be worked away. We have already opened on it 6 yards or more in width, and there is lead still towards the footwall. We are sinking again, and find that the bottom of the sump has gone as good as anywhere, as any part of the lode we have seen, with regard to the evidence of its holding down. We have a large vugh in the very bottom, with fine specimens of lead and carbonate of lime mixed together. When we get the communication with a new level below we shall have a great advantage for breaking large quantities of stuff. The Gorse shaft, which is being sunk for this object, is progressing very favourably, and is now down 5 fms., and we expect that in about three months it will be down the required depth—15 fms. We have two men stoping in the bottom of the 15. The rest of the lode we are working on is worth about 1/2 ton of lead per fathom, which will pay a small profit on the present price of lead. We are doing some little repairs to the crusher—changing the rolls, and repairing the raft-wheels, and some other little items in connection therewith. This will soon be finished with, and we shall be in good trim for going on again. There was a very heavy flood last night, which, unfortunately, broke into the adit level, and caused some little hindrance in the No. 5, both in the sump and Gorse shaft.

**DEVON GREAT CONSOLS.**—Isaac Richards, March 4: Wheel Josiah—New South Lode Shaft: In the 130 west the lode is 2 ft. wide, composed of capel, quartz, munda, and a little copper ore. In the 115 west the lode is 1 1/2 ft. wide, composed of capel, quartz, and a small quantity of copper ore.—Wheel Emma, Inclined Shaft: In Daves' cross-cut south, at the 190 east, the ground is tolerably favourable for exploring, and congenial for mineral. In the 137 east, east of Friend's cross-cut, the lode is 3 1/2 ft. wide, composed of capel, quartz, peach, munda, and some copper ore of good quality.—New Shaft, New South Lode: In the 225 west the lode is 5 ft. wide, composed of capel, quartz, peach, munda, and a little copper ore. In the 190 east, the lode is 4 ft. wide, being opened on, is composed of capel, quartz, peach, fluor, copper and ore, worth 2 tons, or 6s., and 4 tons of munda per fathom. In the 190 west the lode, 1 1/2 ft. wide carrying, is composed of capel, quartz, munda, and a little copper ore. In the 175 west, east of Bartlett's winze, on the north part of the lode, the lode is 5 ft. wide, and worth 3 tons of copper ore, or 9s., and 3 tons of munda per fathom. In Marshall's rise in the back of the 175 west, the lode is 4 ft. wide, and worth 4 tons of copper ore, or 12s., and 3 tons of munda per fathom. In the 115 east the lode is 5 ft. wide, composed of capel, quartz, peach, munda, and a little copper ore. In the 100 east, on the south part of the lode, the lode is 3 1/2 ft. wide, composed of capel, quartz, munda, and a little copper ore.—Railway Shaft: In the railway shaft, now down 13 fms. 2 ft. below the 175, the ground is favourable, and fair progress in sinking is being made. In the 175 west the lode is 2 ft. wide, composed of capel, quartz, munda, and a little copper ore. In the 160 west the lode is 4 ft. wide, and worth 3 tons of copper ore, or 9s., and 2 tons of munda per fathom. In Fox's winze in the bottom of the 160 west the lode is 5 ft. wide, and worth for length of winze carried off, 1/4 tons of copper ore, or 12s., and 3 tons of munda per fathom.

**DERBY SYKE.**—William Vipond, Feb. 28: After finishing with sinking the sump hole below the bottom of the shaft I set the men to fix a platform about 3 ft. up the shaft to give us still more standing room for the water. I think this place will hold something like 12 hours water, and will allow the men to get on better with driving, as they will not have to be continuously driving it. They got a commencement with driving on Thursday, and I shall set them a bargain at it on Monday. I propose driving for a time with eight men, as I think we shall get on at least cost with that number than twelve, and do more work comparatively. I do not think the water increased at all last week, and I shall give you my view of what I think will be the best way of dealing with it at an early date.

**EAST LONGSTONE.**—T. Phillips, March 3: I beg to inform you that I am forcing the men on with the driving of the adit level as fast as possible; but the ground gets a little harder as the men drive into the hill, and I suppose it will continue to do so until they get in close proximity to the lode, which I am of opinion is several fathoms ahead of the adit end yet.

**EAST ROMAN GRAVELS.**—A. Waters, March 4: The main points under development and the tribute patches throughout the mine are without change worthy of remark for the last week or two. We shall be ready next week to commence sinking in the 75 fm. level south on a lode worth from 2 to 3 tons of lead ore per fathom. We have delivered the whole of the last sale of lead ore and blende.

**EAST WHEAL LOVELL.**—R. Quentrell, March 3: We have divided and cased shaft, and put the horse-wheel to work. We have also cut plat and barrow-road, and have just commenced sinking below the level, but have not done enough to make any alteration in the lode. We shall now sink the shaft as fast as possible, and also drive east and west.

**FORTESCUE (Stannagwyn).**—J. H. James, H. Harris, March 3: We are proceeding as fast as possible with the buildings; the carpenters are roofing in the houses, and the new road to the engine-house is more than half made. In the old rubbish heaps used for making the road the men have found several pure native silver lumps, evidently left by the old men streaming for tin at surface. Next week we hope to take out the engine from Charlotte Mine, and to commence dressing floors. The lode in the stopes continues as rich as last reported.

**GLASGOW CARADON CONSOLS.**—William Taylor, Wm. J. Taylor, March 1: The shaftmen are getting on fairly with their bargains, cutting plat, &c., and a

the 102. There is not much change in the new lode in the 102 east since our last report. We are only carrying the south part of the lode, which is worth from 8s. to 9s. per fathom. We cannot do anything to the north part until the plat is cut to get away the stuff. In the north lode we have holed the plat the 90 to this level. We are opening out some ore ground, and are now driving east from the bottom of this winze. The lode is worth about 8s. per fathom, but hope it will improve as it gets more under the ore ground in the 90. In the 100, but lode in the 90 west we are cutting in the south to hole to the winze from the 10, and expect to do this in a day or two. This will also open out some ore ground for stoping. The 90 east on the south lode is worth 5s. per fathom, but in the cross-cut south at this level towards the new lode is a little better, and we hope to get a further change soon. The stopes and pitches on the whole are about the same as last reported, varying in value from 10s. to 15s. per fathom. The computed quantity of ore for the next sale is 160 tons, which will be sold on the 22nd inst.

**GLENROY.**—There is no change in the lode in either of the bottom ends since last week's report. We shall not cross-cut to the hanging part of the lode in the north end till the end is advanced 2 or 3 fms. further. We can only make progress in this way from the size of the lode. We are still proving the lode in the bottom of the 60 north, and have on the hanging wall a leader about 1 ft. wide, very good for blende. We are preparing to sink the shaft below the 100.

**GORSEDD.**—W. Edwards, March 4: In the 60 east level the lode is 1 ft. wide, but in hard ground and not yet to value. We are evidently near some change in the 70, for the lode is letting out a little water, which I hope comes from some round about us, and which we have been expecting long. The present composition of the vein is blende and lead mixed, but the 90 sump the lode is 1/2 yard wide, with very nice blende and lead throughout, worth about 10s. to 12s. per fathom. I like the appearance of the ground here very much. There is no change in the tribute bargain. We sold last week 14 tons of lead realising 13s. 15s. per ton, and are busy with another parcel.

**GREAT HOLWAY.**—W. T. Harris, March 4: We are busy at Roskell's, and so soon as the shaft is sunk another 12 ft. we shall fix bearers, cistern, &c., and then I purpose continuing the sinking to a depth of (say) 30 yards, where I expect to intersect the lode. When this 12 ft. is accomplished we can go to work upon the ore proved in the 80 at the engine-shaft, and with other points available the returns may be increased to any reasonable quantity that may be required.—Garden Shaft: The stope in back of the 55 yard level is producing 2 tons of blende and 1/2 ton of lead per fathom. Office shaft is producing 2 tons of blende and 1/2 ton of lead per fathom. The level engine-shaft is producing fully 3 tons of blende per fathom, and very promising. True Blue sump is turning out splendid lead. I have known the mine and its surroundings for 28 years, and have ways entertained a most sanguine opinion of it, and firmly believe in its becoming equal to any in the Principality.

**GREAT LAXEY.**—W. H. Rowe, March 3: As soon as the necessary timber-work at the Welsh shaft is completed, penthouse, sheeting, &c., which the shaftmen are now engaged about, the new bottom level will be driven out with all possible dispatch. From the little that can yet be seen of the lode at this depth it shows good blende. The lode in the 247 and north is gradually improving, now worth 20s. per fathom. A winze recently commenced in the 247 in rich ore has struck into a floor of poor ground, which we think will not be of much thickness, and the lode below it is found as productive as it is above. The 235 end shows but little ore at present, but is now thoroughly ventilated by the holing of a winze from the 220 only a few fathoms from the forehead, which also lays open fresh ground for stoping. The 220 end north is worth 22s. per fathom. An important winze and stope in this level has had to be temporarily suspended, owing to an influx of water. The 235, however, will soon drain, and this is happily counterbalanced by the holing of a sinking from the 210, which will open a rich piece of stoping ground, at present worth 70s. per fathom.—Dumble: The water in the bottom of this shaft is not yet sufficiently drained to enable us to resume work here at the 230, but at the 215 we have very fair stopes both north and south of shaft, and the shaftmen are engaged in developing other important points. I am glad to be able to report an improvement in the 200 end north, now worth 40s. per fathom. The winze sinking from the 185 almost immediately over this end is worth 25s. per fathom. There is nothing special to notice in the workings in this direction at present, and our general report will shortly give you full details. We expected the 85 end north had quite passed through the bunch of ore in the roof of the 110, but it has now improved again. On the whole, the general prospects are better than they were a few weeks since.

**GREAT RETALLACK.**—T. Harris: I have to-day re-set the stope above the 53, to eight men, at 20s. per ton for No. 1 blende, and 10s. 6d. per ton for No. 2 quality, and to be paid 3s. per fathom for stripping down the leader part of the lode, beside the level down to the bottom of the level, as the blende is being away into the side, and I am hoping that this will open a good piece of lead and lengthen our stope. The lode in the highest part of the stope is not looking quite so well for blende as last reported, but it is still a very good lode, and worth an average for length of stope from 3 to 4 tons of blende per fathom. The new shaft below the 13 was communicated with the old 30 fm. level to-day, but the opening was only sufficient to enable me to pull myself through, and it will take two or three days more to complete the shaft as it comes down upon a bunch of ground left standing by the former workers, in which we have a good bunch of blende. The water in the shaft below the 53 is about within 7 1/2 ft. of the bottom of the 57 fm. level, so I am hoping in about another fortnight to get down to the level.

**GREAT SNAEFELL.**—J. Kewley, March 3: The lode in the 130 end north still keeps large, and we only carry a portion of it on the west side. It is composed of good hard quartz, mixed with a little lead. By the footwall there is a branch of blende, mixed with some very nice spar, and the end still keeps letting out water, and has a very promising appearance. The lode is now getting a few fathoms further in we intend proving the lode; putting in a cross-cut on the east side. Our rock-boring machinery continues to work to our satisfaction.

**GREEN HURTH.**—W. Vipond, Feb. 27: I have nothing new to report from Swan's shaft except to say that we have not seen the bottom of the limestone, but may come to it any day. The north end of the 30 is still hard and worthless. I do not suppose we shall have any change till we come to the east and west vein. We must either rush on with this or commence to work the ore from the side further back or cross-cut to the other side of the vein. The latter would be very hard, and I would like to avoid it till we get the east and west vein, when we should very likely have easier ground. The south end of the 30 continues to yield 3 tons of ore per fathom, the ore being embedded in fine, rich, pampy matter. The No. 1 stope going north is worth 3 tons of ore per fathom. The stope near Vipond's sump is yielding at present 4 tons of ore per fathom. We finished the delivery of the sixth wagon of ore yesterday—7 tons 4 cwt. I expect we shall send the last wagon for this sale of ore on Monday, the last, unless prevented by frost. I shall send you an estimate of our present stock of ore in the bargain report next week.

**GREEN HURTH.**—W. Vipond, March 3: The Swan shaft is now down 10 fms., sunk last month 2 fathoms, by 12 men at the bottom and six at top. We are now into the plate and grey beds that lay underneath the first limestone. I expect that we shall make better progress both in this and the hazel than we have done in the upper limestone. The south end of the 30, on No. 1, is now yielding 4 tons of ore per fathom; I have never seen a nicer looking end than this is at present, although it has sometimes been yielding more ore. During last month, 5 ft.; it is set to four men, to drive at 32s. per fathom. The north end of the 30 is both hard and poor at present; driven last month, by four men, 2 fms. 5 ft. We have left this off at present, and I have placed the men to work the east side of the level, near Robinson's sump; it is worth 4 tons of ore per fathom, and set to four men at 87s. per fathom. Stope No. 1, above the 30, is yielding 2 tons of ore per fathom in plate; worked last month 9 fms. 6 in., and set to four men, at 45s. per fathom. The stope near Vipond's sump, yielding 5 tons of ore per fathom, is set to four men, at 55s. per fathom; they were squaring this into the latter part of last month, by day work. The stope is partly in hazel, and will soon be in it entirely, when I think we shall find it more productive than the stope below has been in plate. We finished the delivery yesterday of the seventh wagon of ore, and the last for the present sale; it contained 7 tons 4 cwt. Total delivery 50 tons 8 cwt.

**GRIFFIN.**—Charles Kneebone, March 3: The 15, north on Griffin lode, has improved to 2 tons of lead ore per fathom; the lode is large, firm, and compact, composed of a leader of gossan and lead ore 6 in. wide on the hanging-wall, the 2 ft. wide of carbonate of lime well mixed with lead ore. The footwall has not yet been reached. The No. 1 stope, north of shaft, is worth 15 cwt. of lead ore per fathom. There is no change to report in the No. 2 stope north or the intermediate stope, as I have been obliged to keep those men at the surface repairing the wall against the railway, quarrying stone, &c. The two stopes in the adit north are worth together 25 cwt. per fathom, but the drainage south-west below those stopes show an improvement to 1 ton per fathom, which will be reached in the stopes shortly; altogether the mine has decidedly improved during the past week. The tributaries are raising a good pile of lead ore, and we should have commenced selecting their ore for a sample parcel but for the violent storm of the past two or three days. I have to-day received the invoice of the remaining articles from the foundry, and when this is received we can start the jiggers at once, but they yet remains some work to be done at the top of the shaft and flooring, and our close proximity to the railway makes it necessary that this work is strongly done to resist the vibration of the jiggers and the passing trains, but all will be substantially completed in a week from this date, and in the meantime regular dressings will have commenced to be continued. The shaftmen have not quite completed their bargains, but I expect they will in the course of the coming week, when the north and south ends in the 215 will be set as new bargains, also the winze to sink below the 205 for stoping and ventilation below that level. Last Saturday being the end of the month, the following bargains were re-set:—The 225 drive north by two men, at 4s. 10s. per fathom; the lode is 1 ft. wide, and worth 10 cwt. of ore per fathom. No. 1 stope, over the 205, south of cross-cut, to six men, at 2s. per fathom; the lode is fully 6 ft. wide, worth 20 cwt. of ore per fathom. No. 2 stope, north of No. 1, to four men, at 1s. 15s. per fathom; the lode is 5 ft. wide, worth 20 cwt. of ore per fathom. No. 3 stope, to two men at 1s. 12s. 6d. per fathom; the lode is worth 10 cwt. of ore per fathom. The 190 to drive north by four men, at 5s. per fathom, for 2 fms. stent; the lode is 3 ft. wide, and worth 15 cwt. of ore per fathom. This end is passing through a hard bar of ground, which the lode is subject to at times. This end has been driven for the last 15 fms. through a good course of ore, worth fully 1 ton per fathom. No. 1 stope, south of the cross-cut, to four men, at 1s. 12s. 6d. per fathom; the lode is 3 ft. wide, and worth 15 cwt. of ore per fathom. No. 2 stope, south of No. 1, to four men, at 1s. 12s. 6d. per fathom; the lode is 2 ft. wide, worth 12 cwt. of ore per fathom. No. 3 stope, in bottom of the 190, south of No. 3 winze, to four men, at 1s. 15s. per fathom; the lode is 2 ft. wide, worth 25 cwt. of ore per fathom. A cross-cut to drive west to four men, at 7s. 10s. per fathom. This end is still letting out water, and the ground is more mineralised, and better for driving. A rise over the 70 to the adit, at 30s. per fathom; the lode is 2 ft. wide, worth about 10 cwt. of ore per fathom. I am pleased to see this discovery continuing to hold up. At the end of this month we shall commence to drive in the 60, which will soon lay open some stoping ground. We expect to start the new set of jiggers in the coming week, which will add to our returns.

**HINGSTON DOWN CONSOLS.**—T. Richards, March 3: The lode in the deep adit level east of the south cross-cut continues to produce good stones of ore. The ground in the rise against the shaft in the back of the deep adit is somewhat improved. The sinking of the shaft is still impeded by water from the late heavy rains, but the greater portion of it will be drained when the shallow level and openings around the shaft are completed.

**LOMAX (Old Wheel Rose).**—W. Argall, March 3: The lode still continues its upward progress, about 2 1/2 ft. wide, and the branch of iron pyrites in the end is getting larger, and from the nature of the stuff I fully expect an improvement.

**MIRE VALLEY.**—W. George J. Snelake, March 4: In the 142 east the







aving to the present company, as very little steam-power will be required to keep the mine in work.

The recent great advance in the price of tin and copper renders Carn Camborne the safest and best progressive mine in Cornwall. Immediately it is in full work and returning ore its shares are certain to advance to double their present price. The mine is held in great esteem in the district in which it is situated, and shares realised 6s. or 7s. each in the Cornish share markets when it was previously worked by a company. There is every reason to believe they will command the same price again within a reasonable period of time.

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The future prospects of Carn Camborne are in every way equal to either of the mines above quoted. The announcement of a good discovery in sinking or driving on the course of either of the valuable lodes that traverse Carn Camborne would cause shares to rise to double their present price, which would then only represent 24,000l. for the property, the lowest price for which any progressive Cornish tin and copper property has ever been sold. There is every probability of further considerable advances in the price of tin and copper, which will cause shares in all mines producing these metals to rise much higher in price.

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### The Mining Market: Prices of Metals, Ores, &c.

#### METAL MARKET—LONDON, MARCH 5, 1880.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Fig. GMB, f.o.b., Clyde...	2 19 0	2 19 9	English, ingot, f.o.b. ...	96 0 0	—
" Scotch, all No. 1 ...	3 7 6	—	" bars ...	87 0 0	—
Bars, Welsh, f.o.b., Wales ...	7 5 0	7 10 0	" refined ...	98 0 0	—
" in London ...	7 15 0	8 0 0	Australian ...	91 0 0	—
" Stafford ...	9 5 0	9 10 0	Banco ... (nom.)	—	—
" in Tyne or Tees ...	7 15 0	8 0 0	Straits ...	91 0 0	—
" Swedish, London ...	11 15 0	12 0 0			
Rails, Welsh, at works ...	8 0 0	—	COPPER.		
Sheets, Staff., in London ...	0 11 10	0 10 0	Tough cake and ingot ...	75 0 0	77 0 0
Plates, ship, in London ...	0 10 10	0 10 0	Best selected ...	78 0 0	80 0 0
Hoops, Staff. ...	10 0 0	—	Sheets and sheathing ...	80 0 0	81 0 0
Nail rods, Staff., in Lon. ...	5 0 0	9 10 0	Flat Bottoms ...	83 0 0	84 0 0
			Wallaroo ...	81 10 0	—
STEEL.			Burns, or P.O.C. ...	80 0 0	—
English, spring ...	15 0 0	19 0 0	Other brands ...	75 0 0	78 0 0
" cast ...	30 0 0	40 0 0	Chili bars, g.o.b. ...	53 5 0	—
Swedish, hog ...	15 0 0	—			
" fag. ham. ...	15 0 0	—	PHOSPHOR BRONZE.		
			Alloys I., II., III., and IV. ...	£125 0 0	—
LEAD.			" VI. and VII. ...	145 0 0	—
English, pig, common ...	13 6 0	—	" XI., Spl. bearing metal ...	119 0 0	—
" " L.B. ...	19 0 0	—			
" " W.B. ...	19 10 0	20 0 0	BRASS.		
" sheet and bar ...	19 15 0	—	Wire ...	8½ d.	—
" pipe ...	20 0 0	—	Tubes ...	8½ d.	—
" red ...	21 0 0	21 10 0	Sheets ...	8½ d.	—
" white ...	25 10 0	—	Yel. met. sheath. & sheets ...	6½ d.	—
" patent shot ...	22 0 0	23 0 0			
Spanish ...	18 0 0	18 2 6	TIN-PLATES.*	per box.	
			Charcoal, 1st quality ...	1 14 0	1 15 0
Metal, per cwt. ...	15 0 0	16 0 0	" 2nd quality ...	1 12 0	1 14 0
Ore, 10 per cent. per ton ...	0 15 0	0 25 0	Coke, 1st quality ...	1 9 0	1 11 0
QUICKSILVER.			" 2nd quality ...	1 8 0	—
Flasks, 75 lbs., war. (nom.) ...	7 5 0	—	Black ... per ton ...	17 0 0	—
SPELTER.			Canada, Staff. or Gla. ...	12 0 0	—
Silesian ...	21 5 0	21 10 0	Black Taggers, 450 of ...	30 0 0	—
English, Swansea ...	21 5 0	21 10 0	14 x 10 ...	30 0 0	—
Sheet zinc ...	25 0 0	25 10 0			

\* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IX quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—As we have now entered upon the spring quarter of 1880, which many for so long a time past have been anticipating would prove a season likely to be one of great prosperity and commercial activity, it is to be hoped that the anticipations which have been formed of it will be fully realised, and the metal trade, which during the last six months has taken so prominent a position in the general revival will still continue to make at least an equally proportionate advance both in demand and price. However, just at present our markets are comparatively quiet. Speculation for the time being having greatly subsided, but this probably arises partly through the recent tightness of the money market, and the unsettled state of Russian affairs. There are also some other drawbacks, by which the progress of the trade has been checked, there being a slight falling off in the American demand and a rather less favourable statistical position of some few metals, but, on the other hand, we have good reason to expect an improved Indian, Australian, and Chinese demand on account of the limited quantities shipped to those countries, and also it is not improbable that a recovery may take place in the American requirements, as the full supply of demand from that country just through the recent tightness of the money market, and the numerous contracts which were effected for exportation there. Besides, there are many large orders still to be executed and shipped, and hence the Americans' present wants must sooner or later be satisfied, and therefore it is not surprising that they should, in combination with one another, cease buying for awhile in order that they may be able to secure their purchases on more advantageous terms hereafter. The quietude which prevailed in our markets has assisted "bear" operations, and to a certain extent, they have succeeded in frightening a few weak holders into realising, but too much importance ought not to be attached to the pause in the upward movement, as a little reaction is more likely than not to tend to consolidate the rise and give a further stimulus to speculation, for recent experience has proved that invariably after prices have been slightly reduced from the highest point, consumers and shippers have come forward and purchased freely, and as this has been the case in the past there seems little doubt that many will again avail themselves of the present fall. Hence, the reaction may, after all, prove beneficial to the trade by checking undue speculation, and at the same time stimulating the demand for consumption and shipment.

COPPER.—Some violent fluctuations have taken place in this market during the past week, and prices now for Chili bars are about 2s. to 3s. below what they were last Friday. Many sellers have been pressing sales, and speculative buyers seem to have completely turned round, and hesitate to make any extensive purchases. Hence the business which is being transacted is of a comparatively very limited character. This sudden change in the market is somewhat difficult to account for, as statistics show the deliveries of Chili produce to be very good, being 1810 tons for the last fortnight of the past month, against 1153 tons for the corresponding period of last year. The total visible stock has increased to 61,994 tons, against 59,644 tons on Feb. 1, but this augmentation merely arises through the excess in Chili shipments in the middle of last month, and to which we have referred in a previous article. The charters for the last fortnight of February were 1900 tons, which on being announced on Monday were thought to be heavier than was generally expected, although slightly below the average, and our market opened in a very depressed condition, and prices were quoted at 70s. 10s. to 70s. 15s. cash. On Tuesday the market declined still further, and down to 69s. 10s. to 69s. 10s. cash was accepted, and 70s. to 70s. 10s. forward. On Wednesday the market opened with more tone, and up to 70s. to 70s. 10s. was paid for cash, but a reaction again set in, and the market closed at 69s. 5s., and a still lower figure was accepted yesterday—68s. 15s. to 69s. being quoted for cash. To-day the market has been easy, and closes at 69s. 5s. cash. The stock of Chili copper in Liverpool and Swansea shows a slight decrease, representing about 29,953 tons, against 30,949 tons on Feb. 14.

IRON.—This market has been less active, and prices at the early part of the week assumed a downward tendency for pigs, quotations for manufactured remaining fairly steady. The demand is scarcely so good, fresh orders coming to hand rather slowly; nevertheless, the works throughout the country appear, according to the several reports, to be for the most part actively engaged in the execution of old orders, and large clearances are weekly being effected to America. Recent advices from New York state that the market there is scarcely so firm, and the demand for almost all kinds of iron last week was less pronounced. The Scotch pig-iron market was rather quiet, and No. 1 Gartsherrie is quoted at 32s. the same figure as previously. No. 1 Glengarnock and Eglinton at 31s. and Coltness at 34s. being 1s. less than the last. Hematite pigs are 30s. being 1s. below that realised a fortnight ago. Old rails are selling at 44s. and scrap at 44s. 5s. this latter price being 10s. higher than the former quotation. The Glasgow warrant market having continued to gradually recede all last week, opened on Monday very flat, and a limited business only was transacted at 64s. 6d. to 63s. 3d. cash. On Tuesday there was more disposition manifested to buy, and prices gradually recovered from the lowest point touched on the previous day to 64s. 4½d., when a reaction set in, and down to 63s. 3d. was accepted, when the market again advanced to 64s. 3d., closing thereat. On Wednesday a further improvement took place, and up to 65s. 3d., one month was paid when a reaction set in, and down to 63s. 4½d. cash was quoted. On Thursday the market gave way still further, and m.n. were sold down to 62s. 6d. to 62s. 3d., and to-day the market has been very flat, and as low as 59s. 9d. has been accepted. As may be seen from the following table, the stock in Messrs. Connal and Co.'s stores on the 28th ult. amounted to 447,377 tons, being an increase for the month of February of 8337 tons. Warrants in circulation for 421,650 tons:—

SHIPMENTS—FOREIGN AND COASTWISE.						Tons	12,603			
For the week ending Feb. 23, 1880 .....										
For the week ending March 1, 1879 .....							8,318			
Total from Christmas to date:										
1880.						1879.	1878.	1877.	1876.	1875.
106,644						64,576	54,776	58,608	63,928	80,663
Furnaces in blast at date:										
1880.						1879.	1878.	1877.	1876.	1875.
111						89	85	119	119	122

Imports of Middlesbrough Pig-Iron into Grangemouth:—  
For the week ending Feb. 23, 1880...Tons 3,970.  
For the week ending March 1, 1879...6,305.  
Increase over 1879...2,335.

Stock in Connal and Co.'s Glasgow stores on Feb. 23, 1880, 447,377; Christmas, 1879, 415,625; Christmas, 1878, 199,417 tons.

The Middlesbrough market, although rather quiet, maintains its position, and makers generally are disinclined to give way in their prices. One good feature in the position of the trade in this district is the decrease which has taken place in public stocks, there being on the 28th ult. in Connal's yards only 102,558 tons, being 1802 tons less than on the previous week, and a diminution of 3028 tons for the whole month. Warrants in circulation for 100,000 tons. There are some second-hand parcels offering at rather below last week's quotations, as merchants are reported to be accepting 61s. 6d. to 62s. for No. 3 early delivery, and 1s. more for No. 4. The shipbuilding trade keeps fairly active, and a large order is stated to have been given out for India. Statistics show that the exports last month from Cleveland were about 72,500 tons, and the deliveries for last week were about 20,000 tons; these figures can only be reckoned as eminently satisfactory. There is a fair demand, and hence the reduction in stocks which we have referred to, and a greater part of the stock is said to be held by only two or three makers. Fresh orders for finished iron are not received very freely; nevertheless, all the establishments are reported to be exceedingly busy, and consequently makers see no necessity at present to reduce their prices. Ship-plates are quoted at 7s. 10s.; common bars at 8s. 10s.; angles at 8s. 15s. (less the usual discount); and puddled bars at 6s. to 8s. 2s. 6d. net. A fair business is being transacted on the Birmingham market, and the men keep well employed. An improvement is noted in the demand both for consumption and shipment, and the engineers report increased activity.

The Australian demand is reported to have slightly improved. The leading establishments at Sheffield keep going full time, and many makers find difficulty in delivering within the contracted time. Prices are reported rather better, No. 1 Derbyshire being quoted 75s. to 80s.; No. 3 at 70s. to 75s. A large business is being transacted in manufactured, and makers are stiff in their quotations. Boiler-plates are selling at 10s. 10s. to 11s. 10s., merchant bars at 8s. 10s., hoops at 11s. 10s. and sheets at 13s. 10s. per ton. Activity characterises the Welsh districts, and it appears that a general revival has set in. This idea is carried out by the fact that several ironmasters have advanced their men's wages, as they are not likely to have taken this step had they not good reason to expect that the trade will shortly still further develop. Extensive operations are being carried out at some of the establishments, and most of the works are going full time. Finished iron is in good demand, and all scrap and old material is being freely sought up by the engine and millwrights, and as the recent large purchases of the stock descriptions is greatly diminished, prices are rapidly advancing. The demand for pigs keeps very good, and large clearances of all kinds of iron are repeatedly being effected, chiefly to the United States. Large quantities of iron ores are from time to time being imported at Newport, and prices remain fairly steady.

TIN.—This market is very quiet, and throughout the week prices have made one continuous fall. On early 'Change, on Monday, 93s. was quoted for fine foreign, but later on in the day 92s. 10s. was accepted. The market then remained fairly steady until Wednesday, when 91s. to 92s. became the official quotation, and yesterday the price was further reduced to 90s. 10s., 89s. 10s., but to-day a better feeling has prevailed, and the market closes at 91s. cash. The market is too unsettled to be able to say the price which will be taken as the reduction in the price, and also in the stocks, seem rather to warrant an improved price; but, on the other hand, the New York market appears to be heavily weighted, and if the Americans cannot absorb their supplies some portion may be re-shipped to this country. Besides, the demand for tin-plates seems to have slackened off, and consequently the requirements for these purposes have somewhat diminished. Although the appearances of the market are not very encouraging for a rise, yet we should not be surprised to see a rapid advance whenever a change of feeling takes place. Shipments from the Straits last month being 27, and those from Australia only 425 tons, may exercise a very important influence upon the future of the market as soon as ever business settles down into a better condition, especially as the season is now over for heavy shipments from Australia at nominal rates of freight, and those who hold enough to take advantage of the recent fall in quotations will, in all probability, realise good profits. The statistics published at the end of last month show the total visible stock to be 14,562 tons, against 14,324 tons at the end of January, and 17,842 tons on Feb. 23, 1879. The deliveries were 1778 tons, against 1790 tons for the same period in last year, and 1857 tons last January; and the total deliveries for the twelve months ending Feb. 23, 1880, were 20,799 tons, against 18,652 tons for the previous twelve months.

LEAD.—This market is exceptionally dull, and prices are weak, a few sellers having made some slight concessions, in the hope of stimulating the demand, but without any apparent success.

SPELTER.—Quietude continues to prevail over this market, but prices are fairly maintained. The demand for sheet zinc keeps very limited, nevertheless it is thought by some that as the shipping season advances more orders may be received.

STEEL.—The various works are reported to be actively engaged in the execution of large orders for America, but no new feature can be noted either in the demand or price.

TIN-PLATES.—These have somewhat fallen off in demand, and prices are slightly easier, 28s. having been accepted for I C coke.

QUICKSILVER.—There have been fair sales from second-hands, at gradually receding prices, the last paid being 7s. 5s.

THE MINING SHARE MARKET has not been quite so active this week, and while one or two prominent mines have been in demand at advanced prices, shares generally, and particularly in heavy tin mines, have been much weaker.

The chief demand is for progressive mines in good districts, and with points to come off that may greatly increase their value, quite irrespective of fluctuations in the metal market, which seems to affect old mines so much.

TIN.—The smelters reduced the standards for ore 2s. per ton early in the week, and again 3s. per ton on Thursday, making 5s. in the week. This has caused a general dullness and depression in tin shares. Carn Brea is quoted 87½ to 92½; Dolcoath, 60 to 62½; Cook's Kitchen, 7½ to 8; Levant, 7 to 8; at the meeting the accounts for four months showed a profit of 657l. and a debit balance of 991l. The tin sold realised 3990l.; copper ore, 1678l. The 265 relinquished shares had been sold at 9s. per share, payable on the 31st inst., and, after liquidating debit balance and paying 750l. for the boring machine, there would remain a balance in hand of 657l.

East Lovell, 2 to 2½; East Pool, 31 to 32; North Penstruthal, 2 to 2½; South Condurrow, 11 to 12; South Frances, 17 to 18; Tincroft, 20 to 21; West Basset, 18 to 19; West Frances, 17 to 18; Wheel Agar, 7 to 7½; Wheel Basset, 4½ to 4¾; Wheel Grenville, 9 to 9½; Wheel Kitty (St. Agnes), 5½ to 6. Wheel Peever have given way in the general dullness to 30s. 31. Wheel Unity, 5 to 5½; Wheel Polrose, 2½ to 2¾; Wheel Sisters, 4 to 4½; Wheel Jane, 4½ to 5½; Penhalls, 3 to 3½; West Phoenix, 2½ to 2¾; Phoenix, 5½ to 5¾; South Crofty, 15 to 16; Killifreth, 25s. to 30s. West Kitty, 2 to 2½; the agent reports that the mines continue to improve. In the 72 end driving east the lode is 3 ft. wide, producing tin throughout. New Kitty, 25s. to 30s.

COPPER.—The standard for copper ore at the Cornish Ticketing on Monday advanced 1½s. per ton. The average price of the ore was 3s. 18s. 6d. per ton. Shares for the most part leave off weaker. Devon Great Consols declined through market operations to 12½, and leave off 14 to 15. Wheel Crebors have been largely dealt in at 9 to 9½, and leave off 8½ to 9½. It is expected that the still or stage in the 120 east will be completed this week, and the end resumed. The new lode in the 108 east is worth 30s. per fathom. No. 1 stope 60l. per fathom. The new lode in No. 2 stope is worth 25s. per fathom.

Gunnislake (Clitters) meeting was held on March 2, and the accounts showed a balance in hand of 116l. The sales of ore from Aug. 10 to Jan. 3 realised 2321l. The costs for the same period 3292l. The various points in the mine are valued in the aggregate at 140l. per fathom. West Tolgus, 60 to 65; at the meeting here the accounts showed a profit on two months' working of 96l. 19s., and a credit balance of 1529l. The ore sold, 499 tons, realised 2909l. 8s., and the sales for the next two months, less dues, would amount to 2834l. 16s., which will about meet costs.

Parys Corporation shares have been in good demand, and leave off 35s. to 37s. 6d.; the accounts to be presented to the meeting next week show assets over liabilities of 4236l. 17s. 1d., charging cost of February, and without crediting 260 tons of copper ore sampled or is raising 70 to 80 tons a month, and should the copper market further improve can increase the returns to 200 or 300 tons a month. In the 90 cross-cut south the lode has improved to 3 tons of copper ore and 2 tons of sulphur per fathom.

Morfa Du shares have been largely dealt in, and leave off 25s. to 30s.; the accounts show assets over liabilities of 854l., without including 500 tons of bluestone in stock. The bluestone sold and delivered up to May last realised 2092l., and as the contract was renewed, raising it (beyond the 500 tons) was stopped, and the shaft sunk to another level, where the lode has just been cut into 4 ft., and no sign of wall yet. The ore here is solid and rich in quality, and, as the agent states, greatly enhances the value of the mine.

Mellancar, 6½ to 6¾; the sale of ore on Thursday (603 tons) realised 2258l. Bedford United, 15s. to 20s.; Carnarvon Copper, 14 to 1½; East Caradon, 3½ to 4; Hington Down, 22s. 6d. to 27s. 6d.; Marke Valley, 2 to 2½; East Crebors, 15s. to 20s.; Prince of Wales, 12s. 6d. to 15s.; South Caradon, 130 to 140; West Seton, 55 to 60; West Caradon, 1½ to 1¾; West Devon, 2 to 2½. Mona, 13 to 15; the lode in the 55 has improved, and now worth 6 tons per fathom. All operations, both underground and at surface, are progressing. Smelting in full work. New Cook's Kitchen, 7 to 7½.

LEAD MINES are still rather neglected, and depressed. Vans are 20 to 22; the sale of ore for the month realised 2910l. 5s. Great Laxey, 18 to 19; South Darren, 3½ to 3¾; Herodfoot, 3½ to 4; Derwent, 3½ to 4; in Mr. John Taylor's report, just made, he advises that steps should at once be taken to increase the returns from the great extent of productive ground laid open, and he refers to the plans and sections as showing the immense extent of ore ground opened in the mines. There are also several very important points nearly reached, which are likely to lead to large and valuable discoveries.

Roman Gravels, 11½ to 11¾; the sampling is 200 tons of lead ore and 25 tons of blende. Tankerville, 5½ to 5¾; East Van, 2½ to 3; Aberllyn, 1 to 1½. Glenroy are not so firm at 22s. 6d. to 27s. 6d. Gorsedd and Merilyn, 2 to 2½; Goginian, 3½ to 4; Leadhill, 3½ to 4; Llanwrst, 1 to 1½; North D'Esby, 1 to 1½; Pateley Bridge, 15s. to 20s.; Gwern-y-Mynydd, 5½ to 6; West Asheton, 2½ to 3; West Holway, 1 to 1½; Port Nigol, 2½ to 3; Caron, 2 to 2½; Crosswood, 1 to 1½; Frongoch, 4½ to 5; Hartington Moor, 1 to 1½; Mawston, 1½ to 2; Red Rock, 2 to 2½; West Wye Valley, 1 to 2; Wye Valley, 1½ to 1¾; Ystwith, 1½ to 1¾. Pandora, 19s. to 21s.; at the meeting, particulars of which will be found in another column, the accounts showed assets over liabilities of 204l. 4s. 6d. to Dec. 4 last. The lead and blende ores sold since the previous account realised 2427l. 18s. 3d., against costs 2719l. 2s. 6d. The agents hope now to sell 50 tons of lead and blende per month, which will give a monthly profit. The sale of lead and blende ore for the last month realised 345l.

FOREIGN MINES.—Almadena and Tiritio, 12s. 6d. to 15s.; Birdseye Creek, 3½ to 4; Copiapo, 14½ to 15½; Blue Tent, 2 to 2½. Placerilla, 2½ to 2¾; the new mill is working well, and plenty of ore being extracted from the mine. Hultafall, 1½ to 2; Cape Copper, 38s. to 40s.; Chontales, 7s. 6d. to 10s.; Colorado, 1½ to 2½; Don Pedro, 1½ to 1¾; Eberhardt and Aurora, 4½ to 5; Flagstaff, 2½ to 3½; Frontino and Bolivia, 3½ to 3¾; Nouveau Monde, 1½ to 1¾; South Indian Gold, 2½ to 2¾; New Quebrada, 3½ to 4; Panulillo, 5 to 5½; Pestanera, 5s. to 7s. 6d.; Port Phillip, 10s. to 12s.; Richmond, 12½ to 13; Baby, 3½ to 4½; St. John del Rey, 25s. to 26s.; Santa Barbara, 2½ to 2¾.

The Market for Mine Shares on the Stock Exchange is in a far less satisfactory condition, the dullness noticed at the end of last week has been much intensified during the present; in fact, the market is almost stagnant, and no sales can be effected except at a heavy decline. The drop of 5s. in the tin standards during the week has caused almost a panic in tin mine shares, and shares in copper mines have been following them pretty closely, until it became known that the copper standard was a little better, when there was a slight revival. Lead ores are also fetching a somewhat reduced price, and the market for iron is weaker. All these circumstances considered together have made capitalists less confident, and as the promoters of some of the new companies complaining that their subscription lists are not filling as fast as could be desired, there is an increasing disposition to defer purchases or investments until the cause of the decline has been more fully ascertained.

The Provincial Stock and Share Markets are almost without exception seriously depressed, but at Dublin a large amount of business continues to be done.

The Journal des Mines promises an analysis of the report presented to the (French) Chamber of Deputies by the Commission entrusted with the examination of the bill, adopted in the Senate relative to a revision of the Mining Law of April, 1810.

Kapanga (New Zealand) Gold Company's letters of allotment of shares have this week been posted, and shares have changed hands at 1½ to 1¾. Now that ample capital is subscribed for the full and vigorous development of the well-known rich ore ground, producing 3 to 4 ozs. and up to 5 and 7 ozs. of gold to the ton, there is considered to be no doubt but that there will be renewed attention to the shares. The engines and machinery are in perfect order, and vigorous operations will be forthwith carried out in the development of the mine, and with success, for the benefit of all the newly organised shareholders.

The subscription list of the Pierrefitte Mining Company, to the formation of which, with a capital of 100,000l., in shares of 1l. each, reference was made in last week's Journal, is reported to be filling so satisfactorily that it will be closed on Thursday next. The concessions, which are in the Haute Pyrenées, include the right to all metals (except iron), and there are a lignite concession, a brick earth property, and a limestone quarry. These concessions, the total area of which is 17,500 acres, are held in perpetuity from the French Government at 40l. dead rent and the Government royalty of 5 per cent. on net profits. There are also about 10 acres of freehold, with extensive buildings thereon. There are 47 known lodes on the property, many of which yield silver-lead ore of exceedingly rich quality, while the deposit of lignite, extending over 1000 acres, will become valuable to the company should they hereafter smelt their own ore, a new process of coaling lignite having lately rendered it a very important fuel. The prospects will be found in another column.

Devon Great Consols shares, which a fortnight ago were at about 19 to 19½, have again receded this week, and a few shares were sold to close, it would appear, a speculative account at 12½ to 13½, but they are now again in demand, and much firmer at 14½ to 15. Beyond only a moderate, and it is believed temporary, fall in the price of copper, and in sympathy with the general tone of the metal and share markets, it is considered that nothing has taken place to cause such a serious depreciation in the value of these shares or property—indeed quite the contrary—for there is good reason to believe that the dividend of 40 per cent. paid last week will be followed by another three-monthly dividend of at least a similar if not greater amount in May. It is not doubted that the forthcoming annual general meeting will be the most satisfactory meeting—both to new and old shareholders—which has been held for many years, both financially and otherwise.

South Wheel Frances shares advanced this week to 18, 18½, and there is good reason to believe that the four-monthly dividend will be gradually increased. Mellancar, 6 to 6½; these mines, as will be seen by the manager's weekly reports, are opening out well, and dividends will, it is said, be increased.

South Caradon shares have fallen from 160 to 135, 140, owing, no doubt, to the fall in the copper market, but will again advance, as the discoveries of ore being made add considerably to the intrinsic value of the property. East Caradon shares have fallen from 6s. a few weeks ago to 4s., but no change in the mine.

Phoenix United Mine shares, 5½ to 6.



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### Notices to Correspondents.

**FLINTSHIRE LEAD MINES.**—Can any of our correspondents speak as to what has of late been doing in the matter of South Prince Patrick and St. David's, both lead mining companies, and in the vicinity of the rising Prince Patrick Mine? I fancy the South Prince Patrick was wound-up, but am not sure. Some people at Birmingham had the management of both, but hearing nothing of either for some time past have trusted to your columns for revival of information, if possible.

**WICKLOW COPPER.**—Perhaps your Stirling Correspondent may be good enough, in his weekly letter, to give some information as to what is being done—lodes, quality and quantity of mineral raised here. I have not noticed it of late, but about two years ago your Share List had it, but apparently there were no transactions therein, if I remember correctly.—ADVENTURER.

On reading over your Notes to Correspondents in the *Mining Journal* of Feb. 21, I see it there stated that—"Mine captains are usually working miners, whose superior industry has entitled them to be entrusted with the control of a mine." If such is the case, the writer would wish to know what position the mining engineer occupies in British mines? And what is he required to know before he can receive that title? The writer would also wish to know if a foreigner could pass examinations and receive that title without having previously studied in England. The above information would oblige yours faithfully.—A GERMAN.

**WEST POLGOOTH TIN MINE.**—Perhaps some of your readers can inform me if this company is in existence. The prospectus was advertised in the *Journal* for December last, and it stated that notice of first meeting would be given to applicants, and the meeting published in the *Mining Journal*.—D.

**LIABILITY ON SHARES.**—J. F. F. (New Cross).—Most of the 11 shares in limited liability are required to be paid up in full on allotment. In both the mines mentioned the shares are fully paid; it is, desirable, however, in all cases to see the prospectus before investing.

**CAPITAL SHARES AND PROMOTERS' SHARES.**—The case referred to in the *Mining Journal* a few weeks since of a company's money being expended to create a market for the promoters' fully paid shares is not an isolated one, as I know from sad experience; but why could not companies be launched on the condition that the whole of the purchase money shall be attached and kept beyond the control of the vendors until the whole working capital is subscribed. If 12,000l. purchase money is to be paid surely the early subscribers should be protected against all their money going to the vendors. It is the absence of this protection that makes it so difficult to raise money at all.—CASH.

**LEAD MINING IN WALES.**—F. J. C. (Paris).—A large amount of work is being done in the district mentioned, and one or two of the mines have sent ore to market, but no profits have ever been realised. Lead is found all over the mountain, but the veins are very small and irregular, frequently yielding no ore for fathoms, and then having a few feet, just sufficiently encouraging to give rise to hopes for the future. The management is considered good, but the old maxim is not "a good captain makes a good mine," but "a good mine makes a good captain." A year's further trial will, no doubt, be ample, and as the shares are fully paid it is as well to hold.

**OFFICIAL QUOTATIONS.**—"S." (Ellenborough, Tring).—The quotation 2½ to 2¾ in *Markes Valley* shares in last week's *Journal* was correct. Neither the Stock Exchange Official List nor the other mentioned is altogether reliable; the British Mine list in the former receives very little attention. Thus the Stock Exchange Official List states that Deven Great Consols is in 10,340 shares of 5l. each, with 14 paid. The Prince of Wales Mining Company, in 2800 shares, 15s. paid, which is alone quoted in the Stock Exchange List, has been defunct for some years, and the property has been more than once sold to reconstituted companies. *Markes Valley*, so far from being all paid as marked, is a lost-book concern, and, consequently, each share is liable to calls to an unlimited amount. *Wheal Grenville* (which is really in 6000 shares, with 4l. 15s. paid) is quoted 517½ shares, 15s. 7d. paid; and *Wheal Bassett* is described as in 512 shares, 5s. 2d. paid, instead of 6144 shares; and *West Chiverton* is quoted 17½ shares, paid instead of 19½ shares. These corrections might be continued to *Ashton*, stated to be 2000, instead of 12,000 shares; and others; but as there are here seven inaccurate descriptions in the 20 mines (the aggregate number) quoted further reference to the list is unnecessary.

American subscribers remitting by International Postal Order will oblige by advising, if only by writing their names on a post card; as otherwise it is impossible to know whom to credit, as neither the United States nor the English Post Office give the name and address of the remitter.

**Revised.**—"A. F." (Cwm Pryf). The report is too long for us to publish, especially as it has been printed for circulation—"G. K. N." (Wolverhampton).—"J. D." (Paris).—"Shareholder" (West Devon Great Consols) has better write to Mr. Peter Watson, who will inform him as to the interest he takes in this adventure—"C. B. G." (Bolckow, Vaughan, and Co.).—"Inquirer" (Trevelick Consols) should write to Mr. T. B. Laws, St. Andrew Chambers, Cornhill, who will communicate all information—"G. S." (Victoria-street).—"H. C. S." (Wallingford).—"Investor" (Port Phillip and Colonial Gold).—"R. S."—"Enquirer" (West Devon Consols).—"J. W." (West Polgooth).—"J. B. R."—"J. J. W." (Broad Sanctuary) should have sent all that he wished to be inserted: We have no copy of the matter referred to, otherwise it should have appeared—"An Old Subscriber" (Surfwell Down Right to Slime).—"An officer who has served in Canada and Bermuda." Next week—"Shareholder" (East Chiverton).—"Enquirer" (Mining in Llanarmon District). Next week—"R. S." (Rocks Tin).

## THE MINING JOURNAL,

### Railway and Commercial Gazette.

LONDON, MARCH 6, 1880.

#### THE MINING INDUSTRIES OF LANCASHIRE.

During the last few years great progress has been made in the development of the mineral wealth of Lancashire, and frequent discoveries of valuable beds of ironstone have been made. Only a few days since the Scansdale Mining Company tapped a valuable deposit of iron ore on their royalty about two miles from Barrow-in-Furness, and are sinking a new shaft for raising it. Not long since, too, the Diamond drill tapped a rich bed at Scansdale, where none had been found previously. The Furness Iron and Steel Company also met with a large deposit of ore on their Goldmere royalty, near Furness Abbey, and which was pierced in five places without determining its limits. Another deposit was found near the Roanhead Mines, belonging to Messrs. KENNEDY Brothers. These constant discoveries point to the fact that the field of stone is much larger than was anticipated, and show that the beds extend a long way in several directions, and for years to come will be able to supply the many furnaces in Barrow, as well as in other districts. The deposits of hematite are found in the Lower Silurian and in the mountain limestone, following the dip as veins, and filling irregular hollows. At Furness the deposits, as a rule, are in the mountain limestone, and are considered to be younger than the carboniferous limestone, and would appear to have originally been placed as carbonate, partly displacing the limestone, and partly in previously existing caves. There are about 20 mines producing the red hematite, the most productive being the Park Mine, belonging to the Barrow Hematite Iron Company, which in one year yielded ore of the value of 327,881l. Next to it is the Lindal Moor Mine, of Messrs. HARRISON, AINSIE, and Co., which in 1878 gave to the value of 145,852l., having in that year exceeded the tonnage raised at the Park Mine. The Stank Mine of the Barrow Hematite Iron Company also yields a heavy tonnage of stone. At one time it was thought coal would be found in the Barrow district, and of so much importance was this considered in connection with the furnaces and steelworks that borings were made at Rampside by means of the Diamond drill, but whilst some interesting geological information was obtained the mineral sought for was not met with, much, of course, to the disappointment of those who were interested in the matter. As showing the progress made it may be stated that the quantity of ironstone raised in Lancashire in 1855 was 326,828 tons, whilst last year it was about 1,000,000 tons. The furnaces in the district consume about 750,000 tons, and the remainder is sent into other parts of Lancashire, Staffordshire, Yorkshire, and South Wales. The Barrow Hematite Iron Company have seven mines at Dalton, whilst the Furness Steel and Iron Company have eight or nine at Dalton, Ulverstone, and other places. The following is the tonnage of stone raised in the county for some years past, with the value:—

	Tons.	Value.
1871	931,048	£1,163,810
1872	852,064	1,063,186
1873	926,497	1,157,885
1874	914,357	1,132,595
1875	834,484	625,863
1876	984,460	728,505
1877	993,012	651,169
1878	984,781	601,891

It will be seen that in 1873 the average price of the hematite was considerably more than 14 per ton, whilst in 1878 it was not quite 12s. 6d. per ton. At the present time the price ranges from 31s. to 34s. per ton, so that recent discoveries on old royalties are really valuable. The works at Barrow are amongst the largest in the

kingdom, and are well laid out in every department. There are 16 blast-furnaces, 14 of them being in a row, and something like 2000 tons of metal are taken weekly from those working to the Bessemer converters, of which there are seven, with a capacity of 8 tons each. Having the converters close to the furnace has been found of great advantage, as there was more regularity as regarded the furnaces, for as Mr. SMITH, the courteous manager, said so sensitive was the Bessemer converter that with a very small alteration in the proportions of the various classes of hematite ore used the difference in the steel produced ran up occasionally to 25 or 30 per cent., so that when that occurred they had only to look to the managers of the furnaces for an explanation and alteration. The Barrow Company has long been noted for its Bessemer rails, and the output is probably much larger than from any other establishment in the kingdom. A good deal of the fuel used in the furnaces and the other branches is obtained from pits belonging to the company. The Wigan Coal and Iron Company have 10 furnaces, but not all in blast, and send the pig away in its raw state. The production of Bessemer pig must now be most profitable at the works, ranging from 6l. to 7l. 10s. per ton, whilst the company have their own fuel close at hand. The North Lonsdale Company have three furnaces at Ulverstone; they are 75 ft. high from the level of the hearth to the charging plates, and the dimension of the bosh is 23 ft. Each furnace is cased with wrought-iron plates down to within 2 ft. above the tuyere arches. The Carnforth Hematite Company have six furnaces, but of course they have not all been in blast, and have two six ton Bessemer converters. The production of pig-iron during the last eight years was as follows:—

	Furnaces in blast.	Tons.
1871	34	520,359
1872	35	524,041
1873	36	529,271
1874	33	488,672
1875	31	558,780
1876	30	552,984
1877	33	624,189
1878	30	616,255

Lancashire also produces a good deal of fire-clay found in connection with other minerals, the last yearly return showing an output of 124,000 tons, or about 1-12th of the entire produce of the kingdom, according to the returns furnished by the Inspectors.

The Lancashire coal field is one of the most interesting we have from a geological point of view, and though considerably less in area than that of Yorkshire, it produces a much larger tonnage of coal. The coal in several districts was worked by the Romans, for Wigan was a Roman station. A few years ago, when driving a tunnel to convert the course of the River Douglas, the Arley Mine seam of coal was met with, and was found to have been mined in a most singular manner. The coal was found to have been excavated into a series of polygonal chambers with vertical walls, opening into each other by short passages, having the appearance of a honeycomb. WHITTAKER states that there is strong evidence from discoveries near Manchester that the Britons had made use of coal in that neighbourhood, and also refers to the existence of fragments of coal in the beds of sand under the Roman Road. In the Wigan district the measures are divided into belts, bounded by parallel faults, which range N.W., having throws varying from 150 to 600 yards, the principal ones being the Shevington fault, the Cannel fault of Ince, and the Great Haigh fault. The fault at Red Rock Bridge, north of Wigan, and that which bounds the small end field, near Rainhill, are remarkable for very flat slopes, the angle being about 25° from the horizontal in each case. In the Wigan district there are no less than 16 seams of coal, varying in thickness from 2 to 7 ft., some of them being of an inferior quality. The most valuable is the Cannel seam, a splendid gas coal, being from 1 to 3 ft. in thickness, the next being the Arley Mine, 4 ft. thick. This seam appears to be identical with the Silkestone coal of South Yorkshire and Derbyshire, so that the bed, which at no place has been found more than 5 ft. 6 in. thick, has originally spread over a tract of country from 10,000 to 12,000 square miles in extent! Near to Manchester there is a small coal field, there being seven beds, the thickest of which is only 4 ft. Below the beds that are being worked the seams, no doubt, are much thicker, but to reach them the shaft would have to be 500 or 600 yards deep. In the neighbourhood of Burnley there is a seam of coal 6 ft. thick, and an impure cannel rather more than 2 ft. in thickness. The progress made in the development of the coal will be seen from the undermentioned figures, showing the tonnage raised at different periods:—

	Collieries.	Tons of coal.
1855	357	8,950,000
1859	380	10,660,500
1869	392	13,995,500
1872	424	16,100,000
1875	588	17,930,050
1877	517	17,621,531
1878	529	18,061,411

Lancashire now contains the deepest mines in the United Kingdom, that at Rosebridge, near Wigan, being 815 yards from the surface, whilst there are several shafts varying from 400 to 600 yards in depth in the western part of the coal field. The quantity of available coal in the county down a depth of 4000 feet has been estimated at 5,546,000,000 tons, so that at the present rate of production there will be enough coal to last nearly 300 years.

#### STEEL FOR BRIDGES AND RAILWAY STRUCTURES.

The evidence given on Saturday at the Board of Trade enquiry relative to the Tay Bridge disaster was certainly of a most surprising character. Some of the supporting columns, it appears, were made of inferior iron from Cleveland, and of different thicknesses. One of the witnesses, RICHARD BAIRD, a moulder, said he saw some of the columns of unequal thickness—one side might have been between three-eighths and a quarter of an inch, and the other between one and a quarter and one and three-eighths. Another witness, ALEXANDER HAMPTON, who had been a moulder for 27 years, said he never saw worse metal than was used in casting the columns. He did not know if the defective columns, which were numerous, had been taken out for use in the formation of the bridge, but he believed they were—at least they were never broken up. Then Roman cement, it was stated, was used for filling up cracks and other defects in the columns. These marked defects, assuming that the evidence given is substantially correct, and there does not appear to be any ground for questioning it, brings us to the consideration of the question of the use of steel in railway structures, as being a much stronger and more efficient material, and consequently ensuring a larger amount of safety. Not so long since the Board of Trade appointed a committee to consider the practicability of assigning a safe co-efficient for the use of steel in railway structures. Having given the subject the most serious attention the committee in their report recommended that steel should be used in engineering structures under certain conditions. These were—1. That the steel should be cast or made by some process of fusion, subsequently rolled or hammered, and of a quality possessing considerable ductility and toughness, and that a certificate to the effect that the steel is of this description and quality should be forwarded to the Board of Trade by the engineer responsible for the structure. 2. That the greatest load which can be brought upon the bridge or structure, added to the weight of the superstructure, should not produce a greater strain than 6½ tons per square inch.

The committee, in conclusion, remarked that in recommending a co-efficient of 6½ tons per square inch for the employment of steel in railway structures generally they are aware that cases might, and probably would, arise when it would be proposed to use steel of special make and still greater tenacity, and when a higher co-efficient might be permissible, but they thought those cases must be left for consideration when they arose, and that a higher co-efficient might be then allowed in those instances where the reasons given appeared to the Board of Trade to justify it. Such are the views of Sir JOHN HAWKSHAW, Mr. W. H. BARLOW, and Colonel YOLAND, and we think that those who are responsible for the construction of railway bridges and similar structures would do well to take them into earnest consideration. We believe, also, that there would be very little difference in the cost, seeing that the weight of a steel bridge of any

span would only be about half of what a wrought-iron one would be, and would be able to carry the same load at least. Cast-iron, as shown by the Tay Bridge disaster, is a dangerous material to use, and steel can be more relied upon than iron of any description. Experiments that have been made by some of our ablest engineers and practical iron and steel makers prove that iron is not to be compared with steel in endurance and ductility, more especially the mild Bessemer and that made by the Siemens' process. At present we believe the only bridge constructed entirely of steel is that over the Sota Canal, in Sweden. Yet there is no doubt but that we shall now find steel more extensively adopted in all railway structures, and that it will be about as cheap. However, the lesson taught by the Tay Bridge calamity should not be lost on those who will have the ordering of the new structure, and the directors should take it into consideration whether the adoption of steel, to a considerable extent at least, may not be found equally as economical as iron, whilst at the same time it would be the strongest, and consequently the safest.

#### OLD RAILS.

A slice of good luck has been secured by the railway companies of Great Britain, France, the United States, and, indeed, of all the countries in the world in which railways have been established for any lengthened period. We refer to the sale upon very advantageous terms of large quantities of old rails and scrap-iron, which twelve months since were probably regarded as semi-valueless. The full benefit of the remarkable change in the value of these old materials has probably not yet become fully apparent, but in a few months we may expect to see very important sums encashed under this head. It will be remembered that Mr. H. V. POOR recently gave some remarkable evidence before the Ways and Means Committee of the United States House of Representatives with reference to the chilling effect which he considered the present exorbitant price of steel rails would have upon the American railroad interest, and upon the work of American railroad construction. The opponents of Mr. POOR have since been raking up statistics to show that the increased value of old materials has very nearly kept pace with the increased price of steel rails, so closely, in fact, that as regards old established railroads the extra cost of steel rails is virtually only about \$1.50 per ton. This may be true so far as old established lines are concerned, but the argument is clearly worth very little when we come to deal with new railroads having no stocks of old materials at all. The pinch of the steel rail shoe upon new American lines is certainly most severe at present, and no amount of ingenious reasoning can explain away the fact.

It appears to us to be the interest of the railway companies of both Europe and America to feed the old rail market with a certain freedom, as it is not at all certain that 1881 will witness a continuance of the high rates now ruling for rails and iron generally. The present activity in the demand must, according to all generally received experience, have the effect of stimulating production, and an augmented production implies, as a general rule, lower prices. Present rates are clearly too high to last; they may continue one year, two years, or even three years, but a reaction—and a sharp reaction, too—is one of the inevitable eventualities of the future. Railway directors will, then, do well to make hay while the sun shines, and to turn ugly and dilapidated heaps of old materials into little piles of glittering sovereigns and crisp bank notes.

The experience of the last few weeks with regard to old materials shows the importance of careful utilisation by railway companies of all such resources. It is the companies which bring care and economy to bear upon every detail of daily management which pay satisfactory dividends upon their ordinary stocks. But we concur with the directors of the London, Brighton, and South Coast Railway Company in thinking that the profits which have unexpectedly poured into railway coffers of late, in consequence of the advantageous sale of old materials, ought not to be applied thoughtlessly and recklessly to the payment of increased ordinary stock dividends, but that such profits should be added to reserve or insurance funds calculated to give more general stability to railway working. The London, Brighton, and South Coast is following the example of the South Eastern and forming a good substantial reserve, so as to avert or mitigate the consequences of some special misfortune or some special accident. We think both these companies are wise in their generation.

#### THE COAL AND IRON TRADES OF SPAIN.

Few countries are more richly blessed than Spain, and in none has the perverseness of man done so much to thwart the beneficent designs of Nature. Endowed with mineral resources of extraordinary value, and which have been known to the world for over twenty centuries, Spain is, nevertheless, to a large extent dependent on abroad, and particularly on England, for a supply of those articles which she herself possesses in such great abundance. Since the Carthaginians went thither for copper, tin, lead, and silver Spain has been now and again applied to for mineral products, but even to-day—2000 years after HANNIBAL armed his soldiers with weapons of Spanish metal—the Spanish mineral trade is still in a feeble and unpromising infancy. Indeed, throughout all the meridional districts of Europe the minerals lie dormant, save only where northern enterprise utilises them as auxiliaries. In the South of France, on the slopes of the Pyrenees, there are rich deposits which are but imperfectly opened up. One of the reasons of this is, perhaps, difficulty of transport, though these are too trifling to account for such a stagnation of enterprise. M. ALLAIN TARGE, speaking in the French Chamber during the current Tariffs debate, took the first-mentioned view. He said—"The minerals of the Pyrenees are sufficient to supply a great portion of the works of the South and Centre, but the railway tariffs render their transport almost impossible for us. The department of the Pyrénées-Orientales has some most important beds. That of Fillol notably is very considerable, and contains a mineral of 45 per cent. of iron and 3 per cent. of manganese. We buy it at from 10 to 12 francs a ton, but to bring it to Bessemer costs 17-20 francs for transport, because we have to employ three different railways, who have not agreed upon a reduced tariff, and who have, probably, no interest in doing so." The state of affairs on the other side of the Pyrenees is more extraordinary still, and evidences to what an alarming extent Spanish apathy has clogged the ancient enterprise of the Peninsula.

The coal deposits of Spain are not only extensive, but good and accessible. Their development, however, is meagre, and this must be attributed in part to those difficulties of communication for which the country is notorious, and primarily and principally to the disordered political condition of Spain, which shakes all industries, wastes capital, and deadens the national spirit. The coal basins of Spain have generally been considered, and with good reason, to cover a superficial space of 1,906,720 hectares. Taking the workable beds into consideration, they contain, according to Messrs. SCHULZ and ALDANA, from 2000 to 2500 million tons of coal. As to the current production and consumption of coal in Spain, the French *Journal La Houille* gives some interesting statistics. The actual consumption of coal in Spain is on the average about 1½ million tons per annum, a demand which its own resources are more than sufficient to meet. But it was only in 1825 that a semi-liberal legislation made the working of coal mines at all possible, and since that time the industry has been progressing but feebly. In 1855 the quantity raised was 109,314 metric tons, but by the end of the next five years—the period which marks the greatest increase in Spanish coal mining—the output stood at 339,851 tons. From that time to 1877 the production of Spanish coal nearly doubled, the total rise being from 91,314 tons in 1855 to 675,926 in 1877, and from 18,000 tons of lignite to 30,888. The values expressed in thousands of francs for the two periods were as follow: coal, 1855—1096; 1877—8077; lignite, 1855—190; 1877—406. It has been mentioned that Spain was unable to effect her own supply, and per consequence her importations have increased in like manner with the demand. In 1855 Spain imported 138,103 tons of coal, and in 1877 837,053. It is peculiar that while the production of native coal in Spain has remained almost stationary (about 700,000 tons per annum) from 1872, the importation of foreign coal has gone on steadily increasing, and this principally from England. The districts which furnish the greater portion of the native coal are Oviedo (in Asturias), Corleova, and Palencia. Taking the last published official



figures (those for 1874, for the publication of official returns proceeds slowly in Spain), it will be seen that in that year Oviedo produced 374,914 tons; Cordova, 176,336; Palencia, 119,259; Seville, 13,509; Girona, 6390; Leon, 4721; Burgos, 230. These 695,340 tons for 1874 express a value of 8,576,765 francs, or an average of 12.334 francs per ton. This production requires the aid of 6738 workmen, and 32 steam-engines of a power (globale) of 658 horses. During the same year the production of lignite amounted to 13,346 tons, to the value of 230,333 francs, or an average of 18 francs 75 centimes per ton. Lignite comes principally from the district of Santander, which supplies 2022 tons; Guipozcoa, 1584 tons; Terner, 1157 tons; and then follow seven other provinces with a production varying from 20 to 243 tons. There were 587 workmen and one steam-engine of 10-horse power employed in the production of this quantity of lignites. At the same period there were in Spain 239 coal pits, and 44 mines of lignites.

The annual consumption of coal in Spain from 1872 to 1874 was 1,800,000 tons, distributed as follows:—Metallurgic and siderurgic industries, 500,000 tons; railways, 190,000 tons; gas making, 110,000 tons; navy, 28,000 tons; merchant marine, 110,000 tons; various industries, 362,000 tons; total, 1,300,000 tons. The two most industrial provinces of Spain, Catalonia and the Asturias, are those which consume the most coal, using 300,000 tons each, and the town of Barcelona alone requires 100,000 tons. Spain is dependent upon England for about one-half of its home consumption. This extraordinary state of affairs not only exists but goes on in the same course, notwithstanding the fact that the coal beds of Spain are provided with excellent outlets. The opening up of these mines of wealth certainly presents a field for foreign capital which might be utilised with profit against the dangers and difficulties which beset industries and enterprises in Spain adequately guarded against. The principal causes of this industrial stagnation are the want of capital, and the spirit of initiative, political circumstances, and the difficulties of transport. The first steps to be taken would be to obtain legislative modifications permitting the union of capital; the construction of railways, canals, and roads to facilitate the use of the natural outlets; and the establishment of an equitable system of tariffs. In 1877 Spain had only 6199 kilometres of railway, and the coal traffic on the 5500 kilometres existing in 1872 was only 363,386 metric tons, of which 173,058 were for the use of the railways themselves.

It is well known that Spain is immensely rich in iron ores, whose good quality is equally famous, her mines containing very fine spathic iron, red hematite, magnetic iron, and oxide-hydrate. In 1871 Spain produced 355,762 tons of iron ore, 781,468 in 1872, 811,926 in 1873, 402,952 in 1874, 908,899 in 1876, and 1,162,170 in 1877. The greater portion of this ore is found in the Biscay provinces, and is mainly sent to England, Germany, and France for the manufacture of Bessemer steel, Herr Krupp alone taking 200,000 tons. Very little iron is manufactured in Spain, the greater portion of manufactured iron being imported from Great Britain. In 1875, according to Senor PECHAR, her imports of manufactured iron were as follows, the greater part coming from England:—Pig-iron and cast-iron articles, 19,008 tons; rails, 11,360; plates, &c., 5904; articles in steel, &c., 5483 tons. There can be little doubt but that the immense mineral resources of Spain will one day be taken advantage of, if not by her own people then by foreigners, when the political settlement of the country will attract foreign capital.

#### THE GOLD FIELDS OF SOUTHERN INDIA.

During the past fifteen months a considerable amount of information concerning the auriferous reefs of the Wynad District of India has been published in the *Mining Journal*, and although it cannot be questioned that the commercial prospects of gold mining in the locality named have been much overrated, there appears to be abundance of evidence of the existence of gold deposits, which in Australia or the Western States of America would be turned to good account. The substance of Mr. Oliver Pegler's report was published in the *Journal* in December, 1878, and although there were some complaints at the time that owing to his limited inspection his report was less encouraging than had been expected, he saw enough to satisfy himself that the South Wynad was the Ophir of the Scriptures, and that the reefs were true veins and very rich. The only doubt which exists in the minds of practical men is as to whether there are any natural facilities for making gold mining remunerative, and some have gone so far as to say that in a district where it is difficult to obtain water to irrigate a coffee plantation the washing and treatment of quartz averaging between 8 dwts. and 9 dwts. per ton, could be successfully carried on; but on the other hand it is asserted that ditching has in the United States been attended with profit, and that many auriferous deposits otherwise worthless have been made successful by the aid of purchased water.

To determine what shall be done in the first place after 4,000,000l. profits have been earned, and secondly when an additional 5,000,000l. has been realised, affords some evidence that some of those concerned are sanguine enough for miners, but this very feeling will explain the liberal payment demanded by vendors. Hitherto there has been some doubt as to the justification for the heavy loading of the several companies, but the letter of Mr. R. P. Harding to the *Times* shows that it was absolutely necessary, in the enterprises with which he is concerned, in order to protect the interests of the bankrupt firm of Smith, Fleming, and Co., and of the Glasgow Bank shareholders. His statement is very explicit, and if his anticipations be realised he will entitle himself to congratulation for farsightedness of the strongest kind. He states that believing in the possibility of great results, and desirous that the alleged wealth, if it existed, should not be diverted from the creditors, he pressed his views of the importance of this asset on the liquidators of the City of Glasgow Bank, and with the aid of Mr. Jamieson, the Indian Gold Mines Company was formed to work the properties on terms which he states.

In addition to the purchase money the Indian Gold Mines Company agreed to provide a capital of 50,000l. for preliminary workings, and in the event of the adventure proving successful such further capital as may be required for the proper development and working of the mining rights, the profits to be apportioned:—1. In repayment of the preliminary capital. 2. Until the profits amount to 4,000,000l., 50 per cent. to the vendors and 50 per cent. to the shareholders. 3. After 4,000,000l. have been divided, 50 per cent. to the shareholders, 20 per cent. to the vendors, and 30 per cent. to the liquidators of the City of Glasgow Bank for the purpose of being apportioned among and paid to the contributors of the Bank or their representatives, in proportion to the value of the stock held by them respectively, until such 30 per cent. shall have amounted to 5,000,000l. The opinions of many practical miners who came to see the specimens from the reefs being that the quartz was similar in character to that of Ballarat and other rich districts in Australia, Mr. Harding deemed it prudent to assume they might be right, and especially provided that the vendors (trustees) should not have the power to sell or otherwise dispose of their interests in the company or in its profits until such profits have amounted to the 4,000,000l. before mentioned.

This was done in order that the creditors of the two firms may receive all the benefits of the contract until they are paid in full. Should this end be attained the shareholders of the City of Glasgow Bank will receive in all about seven millions sterling, and, wild as the idea may have been considered at the time, and indeed may still seem, Mr. Harding is assured that the richness of recent discoveries justifies faith in its realisation.

**GOLD MINES IN NOVA SCOTIA.**—From Halifax we learn that 250 ozs. of gold, the result of three weeks' work, have been brought there from Montague. Other mines in the neighbourhood are reported to be doing equally well.

**AMERICAN MINES AND ENGLISH CAPITALISTS.**—The *Denver Tribune* of Feb. 12 states:—Mr. Henry Altman, a New York capitalist, well known in our south-western mining districts, and who has examined them for himself closely, proceeds via New York to London, this morning for the purpose of organising an English company with several millions of dollars to purchase and work on partially developed mines south of Leadville. English capital has never in this way been lost in Colorado, but if our transatlantic cousins will persist in buying mines which have been good but worked out before they bought them

as heretofore in most instances, they have really more themselves than us to blame.

#### PREVENTION OF OVER-WINDING.

Mr. Ralph Moore has issued the following letter to the mineowners in his district as to the circular issued in December last, recommending measures for the prevention of over-winding:—

SIR,—I have received from various owners of collieries enquiries as to the kind of safety-hooks which I would recommend them to adopt. I am to inform you that the Secretary of State has no wish to prescribe what kind of safety-hooks or what kind of patent should be used with regard to these appliances. He is satisfied if owners, after an earnest consideration of the matter, adopt those measures which on the whole appear to them the best calculated to secure the desired object.

RALPH MOORE,  
Inspector of Mines of the District.

Rutherglen, Glasgow, February.

**THE BLANTYRE EXPLOSION.**—The report of Messrs. Wm. Alexander and Ralph Moore, the Inspectors of Mines, appointed to enquire into the circumstances of the Blantyre explosion, has just been issued. The following are the conclusions at which they have arrived:—1. That the arrangements for the ventilation of the pit were sufficient, and that the quantity of air sent in was ample under ordinary conditions. 2. That the explosion was an explosion of fire-damp. 3. That owing to some abnormal condition there had been at the time of the explosion an accumulation of fire-damp of comparatively small extent. 4. That while locked safety-lamps were handed out to the men, some of them had keys, tobacco-pipes, and matches, and some of them had been smoking at the moment of the explosion. 5. That the gas was not ignited at a shot. 6. That up to the time of the explosion five shots had been fired, and in particular one or two of them near the place where probably the gas existed, and that some of these shots may have had the effect of displacing the gas, and bringing it in contact with an open light, which there is too much reason to suppose existed.

**IMPORTANT MINING CASE.**—Two summonses of great interest to the mining community, and the first of the kind tried, were heard at Bedford, Leigh, Lancashire, on Monday. Messrs. Ackers, Whitley, and Co. were charged by the Inspector of Weights and Measures with using unjust scales, according to which colliers' wages are paid. The machine at the pit mouth, in the first case, was found 67 lbs. deficient, and as 1000 tubs of coal were raised per day, the colliers, it was stated thereby lost payment for the getting of nearly 30 tons. The highest penalty of 5l. and costs was imposed in each case.

**RUSSIAN AND ENGLISH COAL.**—Attention has on more than one occasion been called to the probability of Russia opening out her vast reservoirs of coal, and so becoming independent of England for supplies of fuel for her navy and manufactures. A step for that purpose has just been taken by the Russian Government, which has issued instructions for the assembling of a Coal Commission at St. Petersburg next month. The inquiry will extend—1. To a comparison of foreign and Russian coal. 2. An investigation into the causes of the slow development of the coal industry of Russia. 3. The necessary measures to be adopted to render coal for fuel obligatory on all or certain of the Russian railway system instead of wood. 4. As to whether the use of Newcastle and Cardiff coal cannot be discontinued, and vessels of war supplied from the coal fields of the Donetz Government; and as regards the best means of developing the coal supply of Siberia and Central Asia. The coal field of Donetz is a most extensive one, and something like that of South Wales, for the beds from being highly bituminous in the western part of it pass by imperceptible gradations into anthracite in the eastern portion. According to the details and sections contained in the elaborate works of Sir R. Murchison and his coadjutors, the coal fields of the Russian Empire are of enormous area, and in some parts highly productive, and if vigorously opened out would become of great economic value. The coal field between the Dnieper and the Don, north of the Sea of Azof, are amongst the most valuable in Russia, having a total area of 11,000 square miles. In Siberia the extent of the coal measures has not been determined, but there is very little doubt that they cover a large area of country. In Russian Poland there are some of the thickest seams in Europe, one of them, found between two others, being 16 yards in thickness. The report of the Commission, it is said, is looked forward to with more than ordinary interest in certain circles in Russia, whilst we are told that some wealthy associations of Paris capitalists have acquired royalties in the district of the Donetz, and will soon commence operations, and try to affect the supplies of British coal. But everything will depend upon the price at which it can be raised. Labour is very cheap and labourers numerous in Russia, so that considering the cost of transport from England it is to be feared that our exports will be seriously affected. At the present time Russia takes more than one-tenth of all the British coal exported, so that English colliery owners are deeply interested in the problem which the Commission will endeavour to solve.

**THE SKERNE IRON COMPANY.—STARTING OF THE WORKS.**—The works of this company, which have been laid off since the failure last May, have this week been re-started, some puddling furnaces being put on. The plate mills will almost immediately be set in operation, and by the beginning of next week it is expected that 400 or 500 men will be at work. The company has, we understand, been re-constructed, with Mr. Putnam, of Darlington, as managing director, and Mr. Kent as secretary. There is every reason to hope that under the new management the Skerne Company will enter on a prosperous career. This is the last of the Darlington manufactured ironworks which remained to be brought into operation.

**THE IRON TRADE.**—During the prolonged depression of last year 16 limited liability companies connected with the iron and steel trades of the Sheffield district were so seriously affected that their capital of 6,766,530l. had depreciated by 2,182,789l. in August last. On Dec. 1, owing to the revival of trade, the property improved by 2,278,662l., and on February 1 there was a further improvement of 1,215,175l., making an increase as compared with August of 3,493,837l. There was some reaction in February, but the returns issued on Wednesday show an improvement, as compared with those of August, of 3,358,664l.

**THE PEAT LANDS OF EXMOOR.**—A North Devon correspondent writes that it is proposed to make some experiment in the extensive peat lands of Exmoor, with the view to utilising them for the purpose of peat charcoal. It is considered that Exmoor offers an area for working of such an extent that a large number of hands could be employed for the next hundred years without working out the peat deposits.

**AUSTRALIAN AND TASMANIAN TIN.**—The interesting articles on this subject contributed by Dr. Eduard Reyer to the *Oesterreichischen Zeitschrift für Berg und Hüttenwesen*, has just been reprinted in pamphlet form (Wien: Der Verfasser), and will be found extremely useful for reference, as the sources of the various statements are carefully given. Dr. Reyer is neither pessimist or optimist, and believes that as to the future the real output will be found between the depressing statements of Mufford and other Cornishmen and the glowing anticipations of some other correspondents of the *Journal*.

**OBTAINING PRODUCTS FROM COAL AND PEAT.**—A process of separating by lixiviation or percolation paraffine, paraffine wax, oil, or other oleaginous or similar substances from cannel coal, peat, shale, and earths containing hydro-carbon matter, the procedure being varied according to the nature of the hydro-carbonaceous earth or substance in which the hydro-carbon is contained has been invented by Mr. W. BELL, of New York. He takes of coal, peat, shale or earth finely powdered and heated to a temperature of 85° to 100° Fahr., 100 lbs.; he adds thereto in a double vat (whose upper or inner receptacle has a false bottom) 16 gallons of gasoline or naphtha at a temperature of about 85° Fahr., or of sulphuric ether (12 gallons, and allows the same to remain in solution about 4 hours. He then draws the same from the bottom of the said vat and returns it by a tube to

the earth or other substance from time to time at intervals of about one hour, so as to allow the solution to slowly percolate through until by test there remains no paraffine in the said earth or other substance, then the solution is passed through into a second and third vat, and then allowed to run through a worm condenser after adding to the solution the proper precipitants of paraffine or other product obtained by the above described process.

#### GEOLOGICAL SOCIETY OF LONDON.

Feb. 25.—ROBERT ETHERIDGE, F.R.S. (President), in the chair.

Joseph H. Cowham, Westminster Training College; William Alexander Forbes, B.A., Ashley-place; M. H. Gray, Kuching, Sarawak, Borneo; and Charles Thomas Whittem, M.A., B.Sc. (Lond.), F.C.S., Havelock-street, Sheffield, were elected Fellows of the Society.—H. T. Burls, Paramaribo, Dutch Guiana; John Allen McDonald, M.Inst.C.E., Holly-place, Hampstead; and Rev. Thomas Edward Woodhouse, B.A., Amhurst-road, Hackney, were proposed as Fellows of the Society.—John Ward, Lenoxvale, Belfast, will be balloted for as a Fellow; and Prof. F. von Hochstetter, of Vienna, and Prof. A. Renard, of Brussels, as Foreign Correspondents of the Society.

The following communications were read:—1. "On the Geology of Anglesey," by Prof. T. McKenny Hughes, M.A. 2. "Notes on the Strata exposed in laying out the Oxford Sewage Farm at Sandford-on-Thames," by E. S. Cobbold, F.G.S., Assoc. M.I.C.E. 3. "A Review and Description of the various Species of British Upper Silurian Fenestellidae," by G. W. Shrubsole, F.G.S.

At the meeting on Wednesday the following communications will be read:—1. "The Rocks of the South of Ireland and North Devon," by Prof. E. Hull, F.R.S., F.G.S. 2. "A Review of the Family Diastoporida for the purpose of classification," by G. R. Vine; communicated by Prof. P. M. Duncan, F.R.S., F.G.S. 3. "On a New Theoridont Reptile (Cleorhizodon orenburgensis, Twelvetree), from the Upper Permian Cupiferous Sandstones of Kargalinsk, near Orenburg, in South-eastern Russia," by W. H. Twelvetree, F.G.S.

**WINDING AND OVERWINDING.**—An interesting paper was recently read before the Wigan Mining and Mechanical School on Winding and Overwinding, by Mr. C. M. Percy, M.I.M.E., the lecturer on Mechanical Engineering in that establishment, and it has now been reprinted with additions (Wigan: Wall, Wallgate). Mr. Percy carefully discusses the best form of winding-engine, the advantages and disadvantages of the different kinds of ropes, drums, &c., and then describes the chief detaching hooks now in use, and explains their various details and differences. The pamphlet is well worth studying.

**SOUTH STAFFORDSHIRE INSTITUTE OF MINING ENGINEERS.**—The monthly meeting of this Institute was held on Monday, in the Mining Museum, Dudley.—Mr. W. J. Hayward presiding. There was a large attendance. After some routine business, Mr. Hayward called attention to the necessity of providing means for the prevention of overwinding and damage in the case of rope-breaking. They were always anxious to save life, but with so many hooks it was impossible to tell which was the best. Mr. Bladen then described Ormerod's hook, Mr. Hall exhibited and explained Walker's hook, Mr. Sugden displayed and gave a description of his own detaching hook, Mr. Leonhardt and Mr. T. Johnson exhibited the former's patent safety apparatus and the detaching hook, and Mr. Humble showed King's patent and two of his own, one for the prevention of overwinding, and the other for catching the cage on the guides if the rope broke. A committee, consisting of the Council of the Institute, and Messrs. Davis, Parfield, Vernon, Thornton, and the secretary (Mr. Alexander Smith, M.I.C.E.) was appointed to report on the best hook to the members.

**GEOLOGISTS' ASSOCIATION.**—The memorial dinner, to celebrate the twenty-first anniversary of the foundation of this prosperous and useful institution, was held at the St. James's, on Thursday evening (Prof. T. Rupert Jones, F.R.S., the President for the year, occupying the chair). About 150 sat down, and the usual loyal toasts having been drunk, the Chairman, in appropriate terms, proposed the toast of the evening—"The Geologists' Association—coupling with it the names of Hyde Clarke (who may fairly be regarded as the real founder, and the man to whose efforts the successful establishment of the Association was due) and of the Rev. Thomas Wiltshire, as the two leading founders present. Dr. Hyde Clarke, in responding, gave a brief outline of the circumstances which led the founders to undertake the task, and spoke in highly complimentary terms of the energy and ability of their first President (the late Mr. Toulmin Smith), and remarked that among their earliest members, and those which gave the Association strength, and enabled it to succeed, were numerous members of the Palaeontographical Society. The young Geologists' Association progressed rapidly, the number of members speedily reaching 300. At the present time it includes most of the leading scientists of the day, who devote themselves to geology and the allied sciences. The Rev. Prof. Wiltshire also responded. The next toast—the Past Presidents—was given in an able little address, and as ably responded to by Prof. John Morris, M.A., and Mr. Carruthers, F.R.S.; whose names were coupled with it. Prof. Morris said he was highly gratified to be present at the celebration of the maturity of the Geologists' Association, although he had not the honour of being numbered among the 36 who practically originated it. He had been connected with it, however, from the close of its first decade, and the further development which resulted from the infusion of new blood which then took place must, he was sure, be highly gratifying to both Dr. Hyde Clarke and Mr. Wiltshire. He was also very pleased that with that progress they had not in any way interfered with the Geological Society, but on the contrary their mutual advantages were so full appreciated that at the present time they had the president, the two secretaries, several other officers, and about 100 members of the Geological Society on their own list of members. Mr. Carruthers also responded. The toast of the Demonstrators of Museums, Directors of Excursions, Local Entertainers of Excursion Parties, and Local Geologists, was appropriately given by Mr. Alfred Tylor, F.G.S., &c., and responded to in instructive, though humorous, terms by Prof. Owen, F.R.S.; Mr. John Jones, of Guildhall celebrity; and Mr. J. L. Lobley, a past secretary of the association. The Universities and the University College of London, proposed by Mr. Etheridge, F.R.S., was responded to by the Rev. Prof. Bonney, F.R.S., who in a few brief remarks pointed out the relative fields occupied by the older universities, and by those on the model of the University of London. Mr. Hudleston proposed the Geological Society of London, to which Mr. Etheridge as Pres. G. S. responded; and Dr. Henry Woodward, F.R.S., having proposed the Visitors, which was duly responded to, several other toasts were drunk, and the meeting separated after spending a very enjoyable evening.

**TECHNICAL EDUCATION AND THE CITY GUILDS.**—The worshipful Company of Turners have issued their usual annual announcement of prizes offered for competition. They propose this year to give their Silver Medal, the Freedom of the Company, and (subject to the consent of the Court of Aldermen) will also obtain the Freedom of the City of London for any workman, whether master, journeyman, or apprentice in the trade in England, who may send in the best specimen of hand turning in wood, ivory, and precious stones, including engraving, in intaglio. The competition in wood includes turning in both hard and soft wood; and that in ivory includes vegetable ivory. The qualities which will be considered in awarding the prizes are stated in the circular, which can be obtained by every intending competitor. The candidate may make his own selection from the stated conditions, but the one who best fulfils the largest number, including the most important qualities, will be preferred; but it should be observed that prizes may be gained by excellence of turning shown in the simplest objects for every day use. The work must be all hand turning, produced in the lathe without special rest or tool apparatus, and the carving must be the work of the exhibitor. Specimens must not exceed 24 in. in height, and 1 ft. in diameter. A Bronze Medal will be given as a second prize, and certificates of merit, as well as money prizes, will be awarded in both the wood and ivory competitions at the discretion of the judges. There will also be extra prizes given for work in wood exhibited exclusively by apprentices, such work to







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## WILLIAM CRAWFORD FORTESCUE, Deceased.

PURSUANT to an Act of Parliament 22nd and 23rd Victoria, chapter 35, intitled "An Act to Further Amend the Law of Property and to Relieve Trustees," notice is hereby given, that ALL CREDITORS and other persons having any CLAIMS or DEMANDS upon or against the Estate of WILLIAM CRAWFORD FORTESCUE, late of 15, Lockey-street, in Plymouth, in the county of Devon, Solicitor (who died on the 11th day of January, 1880, and whose Will was proved in the High Court of Justice, Probate Division, District Registry at Exeter, on the 9th day of February, 1880, by Everilda Armesell Fortescue, the widow of the deceased, and Edward Gasking Bennett, of Plymouth, the Executors in the said Will named), are hereby required to SEND IN THE PARTICULARS in writing of their CLAIMS to us, the undersigned Solicitors to the Executors, on or before the 30th day of April, 1880.

And notice is hereby also given, that after the said 30th day of April, 1880, the Executors will PROCEED TO DISTRIBUTE THE ASSETS of the said William Crawford Fortescue, deceased, among the persons entitled thereto, having regard only to the claims and demands of which the said Executors shall then have had notice, and they will not be liable or answerable for the assets so distributed, or any part thereof, to any person of whose debt, claim, or demand they shall not then have had notice.

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	Central Foxdale	50	14 2 0	Nevill, Druce, and Co.
Mar. 1	Pandora	20	11 11 0	ditto
	ditto	20	13 0 0	Walker, Parker, and Co.
	ditto	40	13 3 0	Nevill, Druce, and Co.
	ditto	20	13 0 0	ditto
	ditto	80	13 0 0	Panther Lead Company.
	ditto	40	13 11 6	Adam Eytton.

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ONE PAIR coupled HORIZONTAL CONDENSING PUMPING ENGINES, cylinders 18½ in. diameter, 4 ft. stroke; heavy fly wheel, 14 ft. diameter; pinion, 4 ft. 2 in.; spur wheel, 11 ft. 9 in.; pumping crank; wood slide rods, and two cast iron L legs.

FORCING SET, 120 yards long, with 12 in. cast iron ram, 9½ in. diameter trees, and 10 in. square pitch pine main rod.

LIFTING SET, 80 yards long, with solid brass working barrel, 11½ in. diameter, 9 ft. long; 12½ in. diameter trees, and 5½ in. square pitch pine rods, sinking slide, and windbore.

LIFTING SET, with brass working barrel, 10½ in. diameter and 10 ft. long, with clack and bucket pieces and windbore, and 48 yards of 12 in. trees. BUCKETS, CLACKS; has just ceased working.

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H. BRAMALL AND CO., SANKEY BROOK COLLIERIES,  
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## FOR SALE:—

ONE 37 in. cylinder PUMPING ENGINE.

ONE 36 in. do do

ONE 28 in. do do STAMPING ENGINE.

ONE 24 in. do do

ONE 20 in. do do WINDING ENGINE.

SIX 8, 9, and 10 ton BOILERS and FITTINGS.

FIVE 16 head STAMPS AXLES.

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PORTABLE STEAM ENGINE FOR SALE, with two 13½-inch cylinders, fitted with link-motion reversing gear, large boiler, with or without road travelling wheels, and winding and pumping gear.

Also a double 9½-in. cylinder PORTABLE ENGINE.

A 9½-in. cylinder VERTICAL ENGINE, with winding drum, complete. An 8-in. cylinder VERTICAL HOISTING ENGINE, with winding drum complete.

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TO BE SOLD, OR LET, as a GOING CONCERN, the LLANEROHYRAU and TY-IRIA LEAD MINES, in the county of Montgomery. TO BE LET at a royalty of one-eighth, or SOLD for £12,000.

For particulars, apply to EVAN POWELL, Esq., Llanidloes; or Sir JOHN CONROD, Bart., Arbofield, Reading.

FOR SALE, A COLLIERY AND FIRE-BRICK WORKS situate near LLANELLY, CARMARTHENSHIRE. A going concern in good working order.

For particulars, address "Dexter," MINING JOURNAL Office, 26, Fleet-street, London.

## THE DEVON COPPER AND BLENDE MINING COMPANY

(LIMITED).

Incorporated under the Companies Acts, 1862, 1867, and 1877, Which limits the liability of each Shareholder to the amount of his or her Shares.

CAPITAL £50,000, IN A MILLION SHARES OF 1s. EACH.

And £3000 Six per Cent. Preference Shares at £5 each.

To be paid for on Application.

If no allotment is made the 1s. per Share will be returned in full.

Directors are those signing Articles.

BANKERS.—Messrs. DINGLEY and Co., Tavistock.

UNION BANK, 2, Princes-street, London, E.C., Agents for Dingley and Co.

SOLICITOR.—EDWARD NICOLLS, Esq., Callington.

MANAGER.—To be chosen by the Directors when the allotment is made.

SECRETARY.—WILLIAM BAWDEN SKEWIS.

REGISTERED OFFICE.

HIGHER MARKET STREET, TAVISTOCK.

## PROSPECTUS.

This Company is formed to work and explore a mining sett of 505 A. 1 R. 17 P., and a mine thereon, lately known as the "Collacombe Down Copper Mine."

The mine is about ¼ mile from the Devon Great Consols Mines, which are parallel thereto.

The mine stopped working in consequence of the engine boiler bursting. During the time this mine was in work there was sold over £45,000 of ores, at an average of £5 12s. 8d. per ton for copper, and the shares of the mine—viz., 1000—were at one time sold at £60 each.

The MINING JOURNAL of Jan. 2, 1858, states:—"Collacombe is a young and promising mine, near the Devon Great Consols, which entered the Dividend List this year by paying £4500, or £2 5s. per share."

It is now proposed, so soon as an allotment of shares is made, to commence to work this property, which has been obtained on lease for 21 years at a royalty of one-eighth.

There are now on the property various buildings, two engine-houses, &c., carpenters' and smiths' shops, crusher-house, a six-horse stable, engine pond, agent's residence and account house, sump and powder houses, together with shafts, levels, and other work done; the whole of which, with the lease, have been secured for the sum of £5000, to be paid for out of the capital of the company, by 80,000 fully paid shares to bearer and £500 in cash, payable on the day of allotment.

The depth of the main shaft is 96 fathoms.

The ore at the bottom of the mine was worth from £8 to £20 per fathom, and from 12 to 18 months' ore was in sight when the mine stopped.

Application for shares must be made to the company's bankers, Tavistock, and to the secretary of the company, Higher Market-street, Tavistock, Devon, of whom forms of application for shares can be obtained.

The Memorandum and Articles of Association, with the agreement for the purchase of the license and lease of the property, can be seen at the offices of the solicitors, or company's office, Tavistock.

P.O. Orders to be made payable at the Post Office, Tavistock.

Reports and prospectuses can be had on application to the secretary.

DEVON COPPER AND BLENDE MINING COMPANY (LIMITED).  
NOTICE.—An ALLOTMENT OF SHARES in this company WILL TAKE PLACE on THURSDAY, the 11th day of March, 1880.

Higher Market-street, Tavistock, 4th March, 1880.

DEVON COPPER AND BLENDE MINING COMPANY (LIMITED).  
INTENDED INVESTORS in this company will kindly take notice, that ALL APPLICATIONS MUST BE SENT TO ME ON OR BEFORE THE DAY OF ALLOTMENT, March the 11th.

P.O. Orders must be made payable Tavistock.

Higher Market-street, Tavistock, 4th March, 1880.

PIONEER MINING COMPANY (Limited).—The SHARE LIST will be CLOSED on THURSDAY, the 11th inst., on or before which applications must be forwarded.

THE PIONEER MINING COMPANY (LIMITED).  
Issue of 34,000 Shares of £1 each at par; the remaining 16,000 will not be issued at less than 25 per cent. premium.

## DIRECTORS.

CHAIRMAN—HENRY HAYMEN, Esq., formerly chairman of the Don Pedro North Del Rey Gold Mining Company, which company, during his chairmanship, paid dividends of 100 per cent.

THE O'REILLY, 6, Denmark-terrace, Brighton.

JOHN PORTER, Esq., Saffron Walden, Essex.

CHARLES COLES ADLEY, Esq., A.M.Inst.C.E., formerly Telegraphic Engineer to the East India Railway Company, and late Engineer to Her Majesty's Indian Government.

## BROKERS.

Messrs. HAYTON AND MAY, 20, Throgmorton-street, E.C.

SECRETARY—EGERTON STANLEY HAYMEN, Esq.

OFFICES—9, WALBROOK, LONDON, E.C.

## ABRIDGED PROSPECTUS.

This company has been formed for the purpose of purchasing and working the copper mines, the property of E. Ll. Lloyd, Esq., and others.

Samples of the copper ore have been forwarded to Messrs. Johnson and Sons, Assayers to the Bank of England, Her Majesty's Mint, Council of India, &c.

The percentage of copper is unusually high; it is, therefore, anticipated that large dividends will be paid to the shareholders.

Taking the orestuff to yield 8 per cent., the profit would be over 80 (eighty) per cent.

THE PIONEER MINING COMPANY (Limited).—The shareholders will have the option of having their capital invested in this company represented by the freehold estate.

Full prospectuses and forms of application for shares may be obtained at the offices of the company and of the brokers.

As it is not generally known what great fortunes have been made out of mines the full prospectus contains particulars.

This form may be filled in and forwarded to the Secretary of the Pioneer Mining Company (Limited), 9, Walbrook, London, E.C., with cross cheque, or Post Office order.

THE PIONEER MINING COMPANY (LIMITED).  
APPLICATION FOR SHARES AT PAR. DEPOSIT, 2s. PER SHARE.

To the Directors of the Pioneer Mining Company (Limited).  
GENTLEMEN.—Having paid to your bankers—the Imperial Bank (Limited), 6, Leathbury—the sum of £..... being a deposit of 2s. per share on ..... shares of £1 each in the above company, I hereby request you to allot me, subject to the Memorandum and Articles of Association, that number of shares.

Signature.....

Name in full.....

Address.....

Description.....

Date.....day of.....1880.

THE DATE COFFEE COMPANY (LIMITED).  
CHAIRMAN—HENRY HAYMEN, Esq.

The ORDINARY MEETING was HELD at the Cannon-street Hotel, on March 1. The Chairman fully explained the position of the company, and detailed information how the 100 per cent. was to be realised. A full report of the meeting can be obtained at 9, Walbrook, E.C. The WHOLE of the 6800 SHARES have been ALLOTTED. The share certificates will be ready for delivery in exchange for the bankers' receipt on and after Monday next, the 8th inst.

## J. S. MERRY,

ASSAYER AND ANALYTICAL CHEMIST

SWANSEA

SUPPLIES ASSAY OFFICE REQUIREMENTS AND RE-AGENTS.

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STEEL TRAMS & TIPPING TRUCKS.

STEEL (OR IRON) TRAMS AND TIPPING TRUCKS. Patented in Europe, America, and British South Africa. Lightest and strongest made.

R. HUDSON,

GILDERSOME FOUNDRY, NEAR LEEDS





PARIS,  
BRONZE MEDAL, 1867.



ORDER OF THE CROWN OF PRUSSIA.



PALMOUTH,  
SILVER MEDAL, 1867.

**A DIPLOMA—HIGHEST OF ALL AWARDS**—given by the Geographical Congress, Paris, 1875—M. Favre, Contractor, having exhibited the McKean Drill alone as the MODEL BORING MACHINE for the St. Gothard Tunnel.

**SILVER MEDAL** of the Highland and West of Scotland Agricultural Society, 1875—HIGHEST AWARD.

At the south end of the St. Gothard Tunnel, where

## THE MCKEAN ROCK DRILLS

Are exclusively used, the advance made during eight consecutive weeks, ending February 7, was 24'90, 27'60, 24'80, 26'10, 28'30, 27'10, 28'40, 28'70 metres. Total advance of south heading during January was 121'30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tunnel, the McKean Rock Drill continued to work until the pressure was reduced to one-half atmosphere (7½ lbs.), showing almost the entire motive force to be available for the blow against the rock—a result of itself indicating many advantages.

The GREAT WESTERN RAILWAY has adopted these Machines for the SEVERN TUNNEL; the LONDON AND NORTH-WESTERN RAILWAY for the FESTINIOG TUNNEL; and the BRITISH GOVERNMENT for several Public Works. A considerable number of Mining Companies are now using them. Shafts and Galleries are driven at from three to six times the speed of hand labour, according to the size and number of machines employed, and with important saving in cost. The ratio of advantage over hand labour is greatest where the rock is hardest.

These Machines possess many advantages, which give them a value unapproached by any other system of Boring Machine.

THE MCKEAN ROCK DRILL IS ATTAINING GENERAL USE THROUGHOUT THE WORLD FOR MINING, TUNNELLING, QUARRYING, AND SUB-MARINE BORING.

The MCKEAN ROCK DRILLS are the most powerful—the most portable—the most durable—the most compact—of the best mechanical device. They contain the fewest parts—have no weak parts—act without SHOCK upon any of the operating parts—work with a lower pressure than any other Rock Drill—may be worked at a higher pressure than any other—may be run with safety to FIFTEEN HUNDRED STROKES PER MINUTE—do not require a mechanic to work them—are the smallest, shortest, and lightest of all machines—will give the longest feed without change of tool—work with long or short stroke at pleasure of operator.

The SAME Machine may be used for sinking, drifting, or open work. Their working parts are best protected against grit and accidents. The various methods of mounting them are the most efficient.

N.B.—Correspondents should state particulars as to character of work in hand in writing us for information, on receipt of which a special definite answer, with reference to our full illustrated catalogue, will be sent.

PORTABLE BOILERS, AIR COMPRESSORS, BORING STEEL, IRON, AND FLEXIBLE TUBING.

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The premises stand on the historic site of the old Green Dragon, and are the largest in the United Kingdom devoted to the sale of wines wholesale and retail.

"The convivial spirit of the old house still haunts the spot, and refuses to be exorcised. . . . It is just the place for a Mining Exchange, and by the silent but irresistible law of fitness it seems already to have been so constituted."—Mining Journal.—"The coziness of a private club and the economy of the BODEGA are most happily combined."—Continental Gazette.

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#### TO PARENTS AND GUARDIANS.

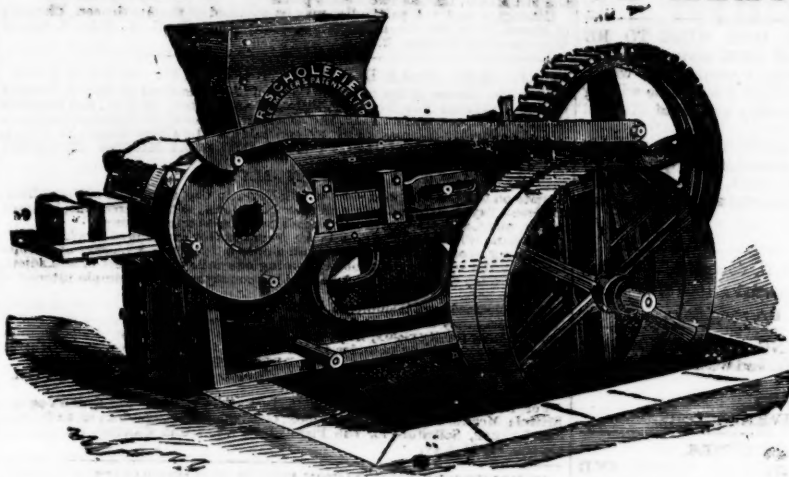
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R. S. begs to call the attention of all Colliery Owners in particular to his PATENT SEMI-DRY BRICK MACHINE, and the economical method of making bricks by his patent machinery from the refuse that is taken from the pits during the process of coal-getting, which, instead of storing at the pit's mouth (and making acres of valuable land useless) is at once made into bricks at a very small cost, by R. S.'s Patent Brick-making Machinery. If the material is got from the pit hill, the following is about the cost of

production, and the hands required to make 10,000 pressed bricks per day:—

2 men digging, each 4s. per day	8 0
1 man grinding, 4s. 6d. per day	4 6
1 boy taking off bricks from machine, and placing them in barrow ready for the kiln, 2s. per day	2 0
1 boy greasing, 1s. 6d. per day	1 6
1 engine-man, 5s. per day	5 0
1 man wheeling bricks from machine to kiln, 4s. per day	4 0

Total cost of making 10,000 pressed bricks . . . . . £21 5 0, or 2s. 6d. per 1000.

(SETTING AND BURNING SAME PRICE AS HAND-MADE BRICKS.)

N.B.—Where the material can be used as it comes from the pit, the cost will be reduced in digging. As the above Machinery is particularly adapted for the using up of shale, bind, &c., it will be to the advantage of all Colliery Owners to adopt the use of the said Brick-making Machinery.

THE MACHINES CAN BE SEEN IN OPERATION AT THE WORKS OF THE SOLE MAKER AND PATENTEE DAILY.  
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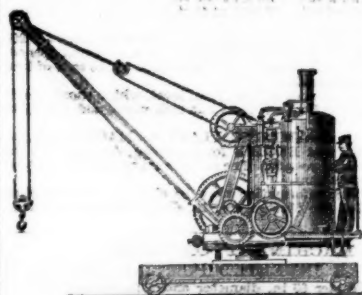
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Ditto Flat Ropes ditto ditto

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Wheal Peccor, West Peccor, Wheal Boys, Wheal Prussia, North Trekerby, West Tolgus, East Pool, South Crofty, Carn Brea, Tincroft, Cook's Kitchen, Dolcoath, West Frances, South Frances, West Basset, Wheal Basset, Penstrutal, Comford, South Condurrow, Tolcarne, and all other adjacent and surrounding Mines in the parishes of Camborne, Illogan, Redruth, and Gwennap.

A MAP, showing the present Boundaries, &c., of the above Mines, coloured, but unmounted, for 10s. 6d., or mounted on cloth and rollers for 15s., may be had, carriage free, from the author, R. SYMONS, 11, Parade, Truro on his receipt of P. O. Order for the amount.



## THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.									
Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.	Shares.	Divid.	Last wk.
10000 Caron, J., Cardigan	2 0	0	2 1/2	2 1/2	0 0 4	0 2	10000	Caron, J., Cardigan	2 0
10000 Carn Brea, c, t, Illogan	56 7	6	95	37 1/2	92 1/2	308 0	1 0	0	0
10240 Devon Gr. Consols, c, a, Tavistock	1 0	0	16 1/2	14 15	117 3	0 0	8	0	0
4298 Dolcoath, c, t, Camborne	10 14	10	65	60 62 1/2	115 1	3 1	0	0	0
6400 East Pool, t, c, Illogan	0 9	9	35	31 32	17 12	9	0	17	6
40000 Glas. Car. (30000 sh. £1 pd., 10000 sh. £1 pd.)	2 10	0	1 1/2	1 1/2	0 0 13	10	0	0	0
8500 Gorseid and Merilyn Con., t, Flint	2 10	0	2 1/2	2 1/2	0 0 0	0	0	0	0
15000 Great Laxey, t, Isle of Man	4 0	0	19	18 19	25 6	0	0	0	0
6400 Green Hurth, t, Durham	0 6	0	8 1/2	7 1/2	8	0	0	0	0
20000 Grovgriffin, t, Cardigan	2 0	0	4	3 1/2	4	10	0	10	0
2800 Isle of Man, t, Isle of Man	25 0	0	—	—	82 5	0	0	10	0
2000 Leadhills, t, Lanarkshire	6 0	0	4	3 1/2	4	0	15	0	0
400 Leadhills, t, Lanarkshire	18 15	0	45	27 1/2	30	0	1	0	0
10000 Mellanor, c, Hayle	2 0	0	12 1/2	6 1/2	0 14	0	0	0	0
9000 Minera Mining Co., t, Wrexham	5 0	0	12 1/2	10 11	68 9	2	0	0	0
20000 Mining Co. of Ireland, c, t, c	7 0	0	—	—	24 0	0	0	2	0
880 North Buxy, t, c, Chacewater	1 14	0	—	—	1 0	0	0	0	0
11829 North Hendre, t, Wales	2 10	0	—	—	7 7 1/2	3	2	6	0
8600 Ditto	1 0	0	—	—	4 1/2	0	0	0	0
10000 Pennant, t, bar, North Wales	5 0	0	3	2 1/2	3	0	10	0	0
10000 Prince Patrick, t, s, Holywell	1 0	0	—	—	0 16	6	0	1	0
12000 Ditto, pref. (8000 sh. issued)	0 10	0	—	—	0 1 9	0	0	9	0
10000 Red Rock, t, Cardigan	2 0	0	2 1/2	2 1/2	4 0	0	0	2	0
12000 Roman Gravel, t, Salop	10 0	0	12	11 1/2	7 16	6	0	0	0
4000 Rhydalun, t, Wales	10 0	0	—	—	0 8	0	0	0	0
512 South Canford, c, St. Cleer	1 5	0	150	130 140	746 0	0	1	0	0
6123 South Condurow, t, c, Camborne	6 5	6	13	11 12	6 12	0	0	15	0
9000 South Darren, t, Cardigan	1 10	0	3	3 1/2	0 2	0	0	2	0
4500 South Wheal Frances, t, Illogan	7 12	4	18 1/2	17 18	39 9	6	0	15	0
12000 Tankerville, t, Salop	6 0	0	6	5 1/2	4 17	6	0	5	0
6000 Tankerville, t, c, Pool, Illogan	11 10	0	24	21 22	50 8	6	0	5	0
15000 Van, t, Llanidloes	15 0	0	22 1/2	20 22	24 10	6	0	10	0
3000 West Chiverton, t, Perranzabuloe	4 15	0	3	—	55 10	0	0	10	0
512 West Tolgus, c, Redruth	95 10	0	65	60 65	33 0	0	1	0	0
600 West Wheal Seton, c, Camborne	51 0	0	60	55 60	446 0	0	15	0	0
1024 Wheal Eliza Consols, t, St. Austell	18 0	0	—	—	30 10	0	0	3	0
4295 Wheal Kitty, t, St. Agnes	5 4	6	7	5 1/2	12 9	6	0	10	0
3000 Wheal Pevor, t, Redruth	7 11	0	32	30 31	4 1	0	1	12	6

FOREIGN DIVIDEND MINES.									
Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.	Shares.	Divid.	Last wk.
35500 Alamillos, t, Spain	2 0	0	1 1/2	—	1 19	9	0	0	6
30000 Almada and Tinto Consol., t	1 0	0	3 1/2	—	0 6	3	0	1	0
20000 Australasian, c, South Australia	7 7	6	1 1/2	—	1 3	6	0	2	0
20000 Cape Copper Mining, t, South Africa	7 0	0	40	37 39	36 10	0	0	12	6
30000 Cesena Sulph. Co., Romagnia, Italy	10 0	0	—	—	1 1	0	0	1	0
10000 Copiapo, c, Chili (200 shares)	17 0	0	16	14 1/2	7 11	5	0	3	0
23500 Eberhardt and Aurora, s, Nevada	10 0	0	5 1/2	4 1/2	1 8	0	0	3	0
70000 English & Australian, t, c, S. Aust.	2 10	0	1 1/2	1 1/2	2 17	9	0	1	0
25000 Fortuna, t, Spain	2 0	0	6	5 1/2	7 6	5	0	1	0
55000 Frontino & Bolivia, g, New Gran.	2 0	0	3 1/2	3 1/2	0 3	6	0	1	0
15000 Linares, t, Spain	3 0	0	6 1/2	—	17 14	10	0	2	0
10000 Pontgibaud, t, France	20 0	0	24	21 23	27 17	6	0	10	0
100000 Port Phillip, g, Clunes (22 shares)	1 0	0	—	—	1 12	0	0	1	0
54000 Richmond Consol., s, Nevada	5 9	0	13 1/2	12 13	8 4	6	0	7	0
40000 Santa Barbara, g, Brazil	0 10	0	2 1/2	2 1/2	0 8	9	0	1	0
120000 Scottish-Australian Mining Co., t	1 0	0	—	—	15 p. cent.	—	—	—	—
80000 Ditto, New	0 10	0	1 1/2	—	15 p. cent.	—	—	—	—
32000 Sentinel, t, s, Arica, France	2 0	0	—	—	2 2 1/2	0	0	2	0
20000 Sierra Buttes, g, California	2 0	0	—	—	0 8	0	1	6	0
40825 Ditto, Plumas Eureka	2 0	0	—	—	2 7	0	0	3	0
253000 St. John del Rey (25 Stock and multiples dealt in)	255 265	—	—	—	12 1/2 p. cent. for half-year, June 1879	—	—	—	—
20000 Tolima, g, s, Colombia	5 0	0	—	—	1 3	0	0	4	0
25000 Victoria (London), g, Australia	1 0	0	—	—	0 13	1 1/2	0	0	7 1/2
2100 W. Prussian (5000 pref. sh. £10 pd.)	10 0	0	10 1/2	—	2 2	0	0	8	0

Have made calls since last dividend was paid.

## NON-DIVIDEND BRITISH MINES.

Shares.	Divid.	Last wk.	Clos. pr.
25600 Aberllyn, t, t, Carnarvon	1 0	0	1 1/2
12000 Assheton, t, Carnarvonshire	5 0	0	1 1/2
11583 Bedford Unit., t, c, Tavis (21 sh.)	0 4	0	1 1/2
30000 Bettws-y-Coed, t, t, 20000 sh. issued	1 0	0	—
8000 Blaen Caelan, t, t, Cardigan	3 0	0	—
3339 Blue Hills, t, c, St. Agnes	4 6	6	4 1/2
30000 Bodidris, t, t, Denbighshire	1 0	0	1 1/2
200 Botallack, t, c, St. Just	125 5	0	100
10000 British, t, t, Wrexham	2 0	0	—
255 Brownegelly, c, St. Neot	0 10	0	—
20000 Bwlch United, t, t, (21 sh.) Cardigan	0 12	6	—
50000 Cambrian, t, c, Cardiganshire	2 0	0	—
6000 Carn Camborne, t, c, Camborne	0 2	6	1 1/2
20000 Carnarvon, t, c, Carnarvonshire	1 0	0	1 1/2
14000 Cresswood Mining Lands, t, t	1 0	0	1 1/2
5120 Clementina, t, t, Llanrwst	1 0	0	1 1/2
23000 Coed Mawr Pool, t, t, Carnarvon	2 0	0	—
7500 Combella, t, t, Wenden	2 0	0	—
8000 Combarnit, t, t, North Devon	0 8	6	1 1/2
2450 Cook's Kitchen, t, Illogan	28 4	9	8 1/2
10000 Cornwall Great Consols, Callington	4 0	0	—
6400 Crook Burn, t, t, Cumberland	0 5	0	—
6144 East Canford, c, St. Cleer	3 4	6	1 1/2
15000 Cwm Dwyfor, t, c, Carnarvon	1 0	0	1 1/2
25000 Cwm Fry, t, t, Wales	1 0	0	1 1/2
1280 D'Eresby Consols, t, t, Carnarvon	10 0	0	—
1224 D'Eresby Mountain, t, t, Llanrwst	20 0	0	40
20000 Denbighshire Consolidated, t, t	3 0	0	3
12000 Derwent, t, t, Durham	4 0	0	4 1/2
10000 Dubby Syke, t, Durham	0 17	6	3 1/2
6144 East Canford, c, St. Cleer	3 4	6	1 1/2
4000 East Chiverton, t, Perranzabuloe	9 10	3	3 1/2
3000 East Craven Moor, t, t, Pateley Bdg.	10 0	0	—
12000 East Crebor, c, Tavistock	0 1	0	1 1/2
30000 East Florida, t, t, Cardiganshire	1 0	0	1 1/2
10000 East Longstone, t, t, Llanrwst	1 0	0	—
21000 East Roman Gravel, t, t, Salop	0 10	0	1 1/2
18000 East Van, t, Llanidloes	5 0	0	3 1/2
4096 East Wheal Buller, t, c, Gwennap	10 8	3	2 1/2
1114 East Wheel Lovell, t, Helston	10 8	3	2 1/2
30000 Flintshire Great Consols	1 0	0	1 1/2
6000 Florence, t, t, St. Ive	5 0	0	5
10000 Fortescue, t, t, St. Stephens	1 0	0	2 1/2
12500 Frongoch, t, t, Cardigan (1000 sh. iss.)	2 0	0	5 1/2
3950 Gawn, t, c, Tavistock	4 9	6	1 1/2
14000 Glenroy, t, t, Isle of Man	4 0	0	1 1/2
20000 Gt. E. Foxdale, t, t, of Man (21 sh.)	0 18	0	4 1/2
10000 Gwyn-y-Mynydd, t, t, Flintshire	4 0	0	5 1/2
10000 Harehope Gill, t, t, Durham (21 sh.)	0 5	0	—
1200 Hartington Moor, t, t, Derby	1 1	0	1 1/2
6400 Harwood, t, t, Durham	0 15	0	2 1/2
3000 Herodfoot, t, near Liskeard	1 0	0	4 1/2
18000 Hingston Down, c, Calstock	7 0	0	1 1/2
6000 Kidderth, t, Chacewater	3 5	0	1 1/2
30000 Lady Ashburton, t, c, Callington	1 0	0	—
12000 Ladywell, t, t, Salop (12000 pref. also)	2 10	0	3 1/2
5000 Lead Era, t, t, Mold	2 10	0	—
2500 Levant, t, t, St. Just	10 14	6	7 8
15000 Llandegla, t, t, Llanarmon	1 0	0	—
6000 Llanawel, t, t, Wales	5 0	0	—
10000 Llanidloes, t, t, Llanarmon	5 0	0	1 1/2
5120 Lovell, t, Wenden	0 16	0	1 1/2
30000 Llanrwst, t, t, Carnarvon	2 0	0	1 1/2
7500 Ditto, 10 per cent. pref.	2 0	0	2 1/2
9000 Marke Valley, c, t, Linkinhorne	5 8	6	2 1/2
1800 Mawston, t, t, South Wales	1 0	0	1 1/2
6000 Medlyn Moor, t, t, Wenden	3 15	10	—
28000 Mid-Devon, t, c (& 17000, 3s. 4d. pd.)	0 6	8	1 1/2
8000 Mineral Corporation of Gr. Britain	10 0	13	12 13
20000 Morfa Du, t, c, g, s, Anglesea	3 0	0	13 15
12000 Morfa Du, t, c, g, s, Anglesea	1 0	0	1 1/2
6144 Mount Carbis, t, c, Redruth	0 10	0	2 1 1/2
4678 New Bronffordy, t, t, Cardig. (25 sh.)	3 16	0	—
12000 New Cathedral, t, c, t, Gwennap	1 0	0	1 1/2
2400 New Cook's Kitchen, t, Illogan	7 0	0	7 1/2
8000 New Cwmystwith, t, c, Cardigan	5 0	0	—
8000 New Dolcoath, t, c, Camborne	3 0	0	1 1/2
8000 New E. Foxdale, t, t, of Man	0 2	0	1 1/2
8000 New Llanfawr, t, t, Carmarthen	0 2	0	1 1/2
3000 New Wheal Pevor, t, c, Redruth	0 10	0	4 3 1/2